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ABSTRACT

The results of a study of school/business partnerships is reported. This privately funded national study was an assessment of collaborations attempting to increase the effectiveness of public schools. Qualitative research techniques were employed to study the components and structures of the programs and to assess student outcomes. The following discussions are presented: (1) introduction to the assessment; (2) the context of school/business collaborations; (3) what they do and whom they serve; (4) how they do it; (5) program effects; and (6) conclusions. In general, the programs showed strong potential for addressing educational reform and serving at risk youth. The increased scrutiny that businesses bring to schools seems to generate better attention to critical needs and new strategies for improving educational performance. Some of the best programs provide the students with experiences that ease the transition from school to the world of work. It is noted, however, that enthusiasm for the new collaboration should be tempered by the knowledge that such programs are limited in what they can do. Measurable positive changes in academic achievement due to these programs have yet to be documented. A 43-item list of references is included. (VM)

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Volume I: Findings from the National Assessment

Allies in Education

Schools and Businesses Working Together for At-Risk Youth

Fall 1987

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Volume I: Findings from the National Assessment

Allies in Education

Schools and Businesses Working Together for At-Risk Youth

by Bernard J. McMullan
Phyllis Snyder

Fall 1987

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Public/Private Ventures' assessment of school/business collaborations was a three-year research effort supported by grants from The CIGNA Foundation, The Edna McConnell Clark Foundation, Exxon Education Foundation, IBM Corporation, The Pew Memorial Trust and The Rockefeller Foundation.

Volume I of Allies in Education was drafted principally by Bernard J. McMullan and Phyllis Snyder. David Gruber contributed a preliminary draft of the chapter on program outcomes. Amy Peck, now a researcher at the National Center of Educational Statistics, contributed an important section of Chapter II on the history of school/business collaborations based on her master's work at the University of Texas. Many individual researchers contributed to the completion of nine profiles in Volume II: David Gruber, Bernard J. McMullan, Sheila Rosenblum, Phyllis Snyder and Jennifer L. Tyler.

Gary Walker and Natalie Jaffe were the principal reviewers of Volume I. They provided substantial comments and gave advice on presentation, clarity and definition of key issues. Also within P/PV, Michael Bailin, Alvia Y. Branch, Tom Smith and Jennifer L. Tyler read drafts at different points and provided important insights and refinements. In addition to these P/PV reviewers, Marsha Levine of the American Federation of Teachers, Hayes Mizell of The Edna McConnell Clark Foundation, L. Scott Miller of Exxon Education Foundation, Alan Campbell of ARA Services, Inc., Badi Foster of the Aetna Institute for Corporate Education and William Spring of the Boston Federal Reserve Bank reviewed the final draft and provided additional insights and observations about the school/ business phenomenon.

In addition to sharpening the insights and findings of the report, Natalie Jaffe executed a major edit of the report that greatly contributed to its clarity and brevity. Subsequently, Michael Callaghan extensively copy edited the report to remove remaining ambiguities and inconsistencies. Judy Wilmoth White initially copy edited the first set of profiles and case studies. Paula Strawberry typed many of the initial individual profiles in the early phases of the study. She was succeeded by Christine Jeter, who typed the remaining profiles and Volume I of the report. Her efforts greatly strengthened the appearance of the overall report.

Finally, the authors wish to thank staff, supporters and participants from all nine programs studied. Their willingness to answer questions, review program materials and data and help in arranging site visits made our work possible.

FOREWORD

As a school board member in a New York suburb in the early 1970s, I recall not a single instance when the board invited the business community to discuss issues affecting our public school system. Nor did business extend its hand to help. As this important volume demonstrates, times have markedly changed.

Allies in Education: Findings from the National Assessment points to significant progress in what is today a growing national movement that unites schools and businesses in common cause. Education leaders, beleaguered by eroding political support and declining resources for public schools, have wisely reached beyond the schools for assistance. And in the business community they have found a powerful ally. Business, for its part, has identified education as a significant factor in the nation's economic competitiveness, and corporations are looking to the schools to prepare workers and citizens to meet the challenges of the 21st century.

But what about the educationally disadvantaged--the nearly 30 percent of the school population whom the system has failed? In Allies in Education, Public/Private Ventures breaks new ground with the first major research to focus exclusively on school/business partnerships that serve the disadvantaged. By evaluating nine of the most successful partnerships, the publication offers cogent examples of ways in which educators and business leaders are providing resources for the schools, job opportunities for disadvantaged youngsters, and improvements in the delivery of education. But the study frankly acknowledges that school-business partnerships have been deficient in their ability to reach students who are most at risk of educational failure.

There is a large unfinished agenda for business and the schools. The problems of children in need call for collaborations that extend beyond the traditional boundaries of education. Clearly, preparation for education and employment must begin in the earliest years of life, long before formal schooling begins. And once in school, the disadvantaged will require a wide array of social services that must be available on the school site or accessible in the community. This suggests the need for a fundamental restructuring of the schools in which business--joined by teachers, school administrators, political leaders and parents--must play a part.

Business increasingly regards education not as an expense but as an investment in the future. To be sure, corporate resources can be leveraged with public and private funds to broaden opportunities to assist the educationally disadvantaged. But the greater challenge for corporate America is to use its persuasive voice to advance public policies and programs that serve the millions of children who lack advocates in the political process. The educationally disadvantaged cannot speak for themselves; business leadership must speak for them.

Sol Hurwitz
Senior Vice President
Committee for Economic
Development

PREFACE

When P/PV embarked on this study in 1984, very little was known about school/business collaborations--what they were, whom they served and what effect they had. Few systematic studies had been undertaken to assess the phenomenon. However, despite the general lack of information about how they might develop and what benefits might accrue, school officials and businesspeople seized upon collaborative arrangements as one key strategy for addressing growing concerns about the condition of our public schools. Nudged further by President Reagan's encouragement of public/private partnerships, school/business collaborations were fast becoming a common characteristic of urban school districts.

In the ensuing four years, school/business collaborations have continued to grow. They are constantly changing and adopting new approaches. Partnerships that were on the cutting edge in 1984 are now routine and have been superseded by several generations of new strategies. Programs modeled after the Boston Compact are developing in more than a dozen communities; individual businesspeople, inspired by Eugene Lang, are personally sponsoring classes to help students complete high school.

Unlike many fashions in education, which have fizzled after an initial burst of popularity, the current school/business movement has shown resilience; by many accounts, it is growing ever more important and influential. This is not to say that all school/-business collaborations are successful. Our reconnaissance indicated that many partnerships, especially those developed in the early years, have already succumbed for a variety of reasons. Others have been--indeed, many still are--primarily cosmetic and have shown little impact. Nevertheless, individual failures have not discouraged the formation of new partnerships.

In many cities, school/business collaborations have become an expected component of the public education. In some, top-level school administrators are evaluated not only for educational leadership within the school system, but for leadership in forging and maintaining new alliances with the business community as well. For example, the stature of school superintendents in such cities as Boston, Philadelphia and Atlanta has been enhanced by their constructive relationships with the business community. In contrast, a breakdown in a jobs program arranged with the business community precipitated in part the recent resignations of two top administrators in the New York City public school system.

Business participation has also resulted in significant contributions of resources to public schools. The most tangible are corporate donations of grants, scholarships and equipment to schools; part-time and summer jobs; and the legions of volunteers who now assist educators in school programs.

The private sector's less tangible contributions, though, may be even more important. In an unprecedented show of corporate support for public education, chief executive officers of five major corporations testified at a Congressional hearing as advocates of reauthorization of federal public education funds for at-risk youth. William Woodside, chairman of the executive committee of Primerica, said at the hearing that "Our collective appearance here today is intended to underscore the importance we attach to national efforts to provide educational opportunities for disadvantaged and low-income children." Charles Parry, chairman and chief executive officer of Aluminum Company of America (ALCOA), noted that business interest in public education is grounded in a clear understanding of the connection between education and economic prosperity. "Business's concern for education is based on a powerful fact of life: education provides us with a capable work force, with communities in which we can live and operate, and ultimately with a prosperous marketplace."

Our report, **Allies in Education**, presents an assessment of nine of the strongest school/business collaborations that serve disadvantaged youth. Our findings are neither optimistic nor pessimistic. We found that school/business collaborations have provided substantial resources to public education and have given many youth with academic and economic disadvantages direct work experience and a level of personal attention that is often lacking in large high schools. At the same time, we also saw evidence of higher teacher morale, improved physical plant, improved academic achievement and higher attendance rates.

However, we also found important limitations of these collaborative efforts. First, the resources business can be expected to invest can only take educational improvement so far. Programs must inevitably choose between serving a very few youth intensively or more youth superficially. Second, the strategic positioning of business resources is also limited. The kinds of collaborative programs we currently see cannot bring fundamental change in how public education is delivered. These programs are generally "add-ons," grafted to existing educational programming and unable to effect other students in the system.

Finally, even among the nine programs that were selected because they seek to serve disadvantaged youth, school/business collaborations generally fail to serve those most at risk--those with chronic attendance problems, histories of poor academic performance or other indicators of educational failure. Since the centerpiece of most programs is business's contribution of jobs, program success depends on student success on those jobs. Inevitably, programs refer students most likely to succeed.

We do see benefits to some students, teachers and schools resulting from these collaborations. But in the long term, their greatest contribution remains potential--the promise they hold for creating an educated, influential constituency for public education.

Michael A. Bailin
President

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EXECUTIVE SUMMARY

Partnerships between schools and businesses are receiving increasing attention as a strategy to boost the effectiveness of the public schools. Many of these partnerships focus either directly or indirectly on disadvantaged youth, in response to a growing concern that schools are not preparing thousands of primarily poor, urban, minority youth for a successful transition into the labor force. A number of questions surround such collaborations: What are their key components? Whom do they serve? What role does business play? What effects do the partnerships have? In short, do they work?

To identify the elements of these collaborations and assess their potential for improving the preparation of disadvantaged youth, P/PV undertook a three-year assessment of school/business partnerships in 1984. We chose to study nine programs that represented the best examples of approaches being employed in serving economically disadvantaged and educationally at-risk youth. The programs chosen for study were among the few collaborations we encountered that met the following criteria: by 1984, they had been in continued operation for two or more years; they served students who are educationally at risk or economically disadvantaged; they had demonstrable, strong involvement from a business partner; and they involved more than 50 youth.

Volume II of Allies in Education: Schools and Businesses Working Together for At-Risk Youth presents case studies of these nine collaborations. Volume I, subtitled Findings from the National Assessment, analyzes the school/business phenomenon as it is represented by the nine programs. It places recent school/business collaborations in the context of partnerships that have existed between education and business throughout this century; characterizes the various activities and interventions that collaborations have undertaken; describes the role of business in the partnerships; analyzes the partnerships' effects on students, schools, business partners and education in general; and discusses the implications of these findings for collaborative efforts both now and in the future.

The assessment was supported by The CIGNA Foundation, The Edna McConnell Clark Foundation, Exxon Education Foundation, IBM Corporation, The Pew Memorial Trust and The Rockefeller Foundation.

THE NATIONAL ASSESSMENT

From the small group of programs that met our study criteria, P/PV selected nine collaborations employing a wide variety of approaches to serving at-risk youth. The nine included examples of three major models:

- The most widespread type of collaboration involves the pairing of a business or group of businesses with a single school. In this type of collaboration, the business partner contributes such forms of assistance as mentors and tutors for students, grants for teachers, equipment, and maintenance help. Many also sponsor schoolwide awards and contests. Representing the "adopt-a-school" model in the study are the Tenneco/Jefferson Davis Business-School Partnership in Houston and the Primerica/Martin Luther King, Jr. High School Partnership in New York City.

- Collaborative efforts that focus on entire educational systems at either the local or state level are the most infrequent type of program. In most of these systemwide efforts, business contributions involve an infusion of new resources (grants, job opportunities, volunteers), increased community support for public education and special programs for at-risk youth. This type of program is represented in the study by the Boston Compact, the Atlanta Partnership of Business and Education--which aim to improve local school districts--and the State of California's Regional Occupational Centers and Programs, a rare statewide education initiative that involves business collaboration.

- More numerous are collaborations intended to increase the employability of economically disadvantaged youth through the provision of special classes and part-time jobs outside the traditional high school curriculum. These student-focused programs serve small groups of carefully targeted youth in order to provide individualized attention. The programs are usually of short duration, serving youth only in their last one or two years of high school. Representations of this model in the study are the Off-Campus Work/Study Program in St. Louis, New Horizons in Richmond, and Teen Opportunities Promote Success (TOPS) in Birmingham. The Philadelphia High School Academies are also in this category; however, they differ from the other student-focused programs in that they serve larger numbers of youth, enroll them for their entire high school career and integrate the teaching of academic and vocational subjects.

While all the programs in the study can be classified as one of these three models, student-focused elements are often found in systemic interventions, most notably in the Boston and Atlanta programs, and in most adopt-a-school partnerships.

METHODOLOGY

P/PV's study of the nine programs was grounded in qualitative techniques: site visits, observations of program operations, structured and semistructured interviews, and reviews of program materials. Site visits were conducted in 1985 and 1986. When available, descriptive and quantitative data were collected. In two larger programs--the Boston Compact and the Philadelphia High School Academies--more extensive quantitative efforts were undertaken to assess student outcomes.

EFFECTS ON STUDENTS, SCHOOLS AND BUSINESSES

The profiles that constitute Volume II of this study describe the nine chosen collaborations in terms of their operations, the nature of business involvement, and the type of youth served. Effects and potential effects of the various approaches taken by these programs in preparing disadvantaged youth for adult employment are also assessed. Brief descriptions of the programs are shown in Table III.1 on page 24. The study identified several significant effects that collaborations had on the three participants: students, schools and businesses.

Students. Student-focused programs have the greatest effect on individual students in the areas of in-program and postprogram employment. Many students gain part-time and summer employment from these programs, which allows them to establish a work history, experience the expectations of employers first-hand and gain increased access to major employers. The limited information available on postprogram employment indicates that the programs increase both access to employers and job opportunities for students. Most available positions are clerical.

Collaboration components that seek to enhance educational and support services through refocused curricula, tutoring programs and other activities appear to have far less effect on students, at least in the short term. However, student-focused programs do increase the amount of individualized attention students receive from teachers, mentors and work supervisors. Some programs also provide students with greater access to postsecondary education and offer financial support to those who wish to take advantage of this increased access.

Schools. As might be expected, the programs that produce the most significant effects on schools and school districts are school-focused programs. Adopt-a-school programs bring the most noticeable improvements--usually by enhancing existing school services or instituting new services. Aid from the business partner targeted for such improvements as enhancement of the physical plant, tutoring services, job programs, school athletics, and extracurricular activities clearly bolster school atmosphere and morale.

Teacher morale is improved by systemic and student-focused programs as well as school-focused programs. All types of programs are cited as affording teachers opportunities to meet professionals outside the school, participate in curriculum development, develop professional relationships with other teachers, teach smaller classes, and receive recognition, financial bonuses and other rewards.

The measurable effects programs in the study produced on academic variables--primarily attendance, retention and achievement--were of mixed significance. In general, student-focused programs that emphasize development of employability show little or no effect on these variables at the school or system level, though their effect on the students within the program is often significant. Independent initiatives, such as Richmond's New Horizons, St. Louis' Off-Campus Work/Study Program and Birmingham's TOPS, report high program completion rates and high levels of attendance; however, their information on student academic performance is extremely limited.

The Philadelphia Academies, on the other hand, report more significant effects on academic measures--even at the school level. This is not accidental--the Academies differ from other student-focused programs in the study in that they specifically seek to improve both employability and academic performance, serve a larger number of students, and serve students all through their high school years. The Academies' average attendance is reported at more than 90 percent and their dropout rate is set at 20 percent. Both figures are drastic improvements over districtwide statistics. Also, a large majority of Academy students graduate, about half of whom enter postsecondary training. Since students are recruited from a group whose achievement test scores generally place them in the lowest quartile before enrollment, these figures indicate a significant academic impact.

As a group, systemic programs have increased attendance rates and report limited positive effects on academic achievement scores; however, they have been unsuccessful in reducing high dropout rates. Furthermore, some programs produced no measurable effects on academic variables; even when changes were found, it was often impossible to directly credit the partnership program. However, the additional resources and increased attention focused on the school by these initiatives is likely to have had at least an indirect effect on academic results.

Business. Since businesses are in effect the givers in partnerships while schools and youth are the receivers, it is not surprising that our study yielded scant evidence of direct or immediate benefits to businesses. The following apparent benefits to businesses were considered but were found to be of little significance:

- Student workers are paid at lower rates than regular employees, but additional training and supervision costs offset any wage savings.

- While some student workers eventually gain permanent status, there is no formal process for this advancement and few students are involved. Businesses have not developed a reliable method for recruiting and screening program students as potential employees. Also, while businesses sometimes become involved in vocational curriculum development, students are trained according to industry specifications and do not necessarily join a company sponsoring the partnership.

- Although students and supervisors often develop important relationships, the students' visibility in the company is frequently very low and their presence in the organization may be overlooked by other employees.

Despite the lack of immediate benefits, businesses report that they anticipate long-term benefits from participation, such as improved public relations, a better-trained work force, and an improved social and economic environment in which to conduct business.

LIMITATIONS ON THE EFFECTS OF PARTNERSHIPS

As currently constituted, school/business collaborations have displayed three key limitations. First, the partnerships' activities have not significantly reduced the major problems facing urban schools; realistically, it may be difficult to expect them to. Although businesses offer additional funding, equipment, volunteer and political support to the schools, the scope of these efforts is too limited to resolve the social, fiscal and educational crises that confront many inner-city schools and school districts.

Second, even collaborations that directly target youth who are economically disadvantaged or academically at risk rarely are able to help those most severely at risk. The clearest evidence of this shortcoming is seen in school/business partnerships whose central activity is providing part-time work opportunities. Because of age requirements and maturity considerations, these programs usually limit their activities to high school juniors and seniors, a status that the most severely at-risk youth rarely reach. Also, the demands of the workplace require these programs to exclude the most problematic students.

Finally, although school/business collaborations are commonly considered "partnerships," the distribution of direct benefits is extremely lopsided in favor of the schools and students. Since few short-term benefits accrue to the businesses, their involvement can largely be considered a contribution, which makes the partnership a fragile commodity if the needs and conditions of the business partner or partners change.

CONCLUSIONS AND FUTURE PROSPECTS

The school/business collaborations we studied have shown strong potential for playing key roles in addressing educational reform and serving at-risk youth. The most immediately important are its roles as a catalyst for educational change and improvement; as a source for new incentives to keep at-risk youth in school; and as a source of advocacy and support for public education. Although school/business collaborations cannot alone effect substantial educational change and improvement, the increased scrutiny they bring to education can foster greater attention to the critical needs of schools; help generate new strategies for improving educational performance; and inspire policy leaders to put educational improvement on the community, state and national agendas.

Many school/business partnerships in our study have shown great innovation in providing at-risk youth with practical work experience in programs that underscore for youth the critical link between academic achievement and economic success. This practical experience and the linkage it concretely exemplifies are all too rarely provided to at-risk youth. In addition, as partnerships have expanded and matured, increased attention has been given to providing incentives for youth to obtain postsecondary training. This has been accomplished by providing generous scholarship support and, even more important, by encouraging youth to view additional training as desirable and possible.

School/business collaborations have also demonstrated potential for filling an important gap in public support for education, a gap that has existed since changing demographics in many communities cost the public schools many of their most effective advocates. School/business partnerships have acted as a vehicle through which many community business leaders have developed a firm grasp on the essential issues and problems confronting public education. This increased awareness has fostered greater support among businesspeople on behalf of education in their communities. The potential of business as a school improvement advocate has long been left unexploited; however, the advocacy that has been evidenced by the Boston Compact and other collaborations, and the growing number of corporate leaders who are lending their voices to the support of improved public education show that this potential may yet be realized.

The number of school/business collaborations appears to still be growing. The partnerships are drawing increased attention in educational circles, business organizations and the popular press. More and more communities are examining ways to facilitate partnerships or expand existing programs. New initiatives and strategies to address the needs of both public education and at-risk youth are being developed at an impressive clip.

It is important, however, that enthusiasm for this movement be tempered by the knowledge that school/business collaborations have so far met with only limited success in fostering educational improvements to assist at-risk students. Despite the greater attention being devoted to dropout prevention within these programs, few measurable positive changes have yet been documented. Also, few programs have the capacity to bring about educational improvements by themselves. Instead, most must encourage such reform through example and by developing a knowledgeable constituency to work with and on behalf of the public schools. If business involvement with the public schools can provide creative examples of how to improve the achievement and prospects of at-risk students, and at the same time develop a constituency for continuing educational improvement for these students, it will have played a vital and critical role in helping solve a major dilemma in American public education.

I. INTRODUCTION

One of the most important recent developments in the quest for educational improvement has been the increased involvement of business. During the past decade, new partnerships between schools and businesses have been formed all over the country. Many of these partnerships have been heralded as having significant potential for effectiveness. This report considers the importance, impact and potential of such partnerships, especially as they relate to at-risk youth. The report is based on case studies of nine school/business partnerships that were chosen because they represent a wide variety of approaches and have reputations for achievement.

Almost a quarter of all public school districts in the U.S. claim some type of partnership activity between their schools and the private sector. Many of the nation's largest corporations have joined the movement to help schools do their jobs better. The partnerships are credited with helping revitalize public interest in education, developing new political constituencies for schools and infusing schools with new resources.

The trend is most noticeable in urban school districts, where the problems of academic decay, absenteeism, high dropout rates and poor academic achievement are dramatic and well-publicized. Businesses have heeded the call for help and have become involved in large numbers. Their intentions in joining this movement often differ. Some describe their efforts as the discharge of corporate social responsibility; others perceive their actions as consonant with long-term, enlightened self-interest; still others hope to get an early start on recruiting new employees. While businesses cite a variety of reasons for becoming involved, the ultimate aim of all the partnerships is to better prepare youth to meet the economic demands of adulthood.

THE P/PV ASSESSMENT OF SCHOOL/BUSINESS COLLABORATIONS

In 1984, P/PV began a three-year assessment of school/business collaborations. The work has been supported by The CIGNA Foundation, The Edna McConnell Clark Foundation, Exxon Educational Foundation, IBM Corporation, The Pew Memorial Trust and The Rockefeller Foundation. We had four principal objectives for our research:

1. To describe the operation of key types of partnerships;
2. To characterize the youth who are served;
3. To describe the nature and extent of business involvement; and

4. To assess the impacts and potential effectiveness of the school/business collaboration approach to the problem of preparing at-risk youth for successful and self-sufficient adult employment.

To provide descriptive assessments of a select variety of joint school/business initiatives, P/PV undertook direct field research involving interviews, program observations and review of documentary evidence. The research was designed to answer basic questions about the programs: What is the nature of the school/business collaboration? What are its main components? What is business' role and contribution? When P/PV conceived the study, available information on those issues consisted of documents prepared to recruit students or supporters and historical descriptions written by program personnel. No in-depth, objective assessment based on direct observations had been done.

The second objective sprang directly from P/PV's central mission, which is to identify initiatives that help disadvantaged youth become productively employed and self-sufficient. School/business collaborations were clearly a potentially useful initiative; what was unclear, however, was the extent to which at-risk youth were being targeted, recruited and served by the collaborations and whether the services being offered were appropriate.

The third objective of the study concerned the role the business community plays in the collaborations. Although business has been especially active in supporting higher education in recent decades, its interest at the secondary and elementary levels is new. P/PV was interested in the role business plays in collaborative efforts, the reasons business becomes involved, and the prospects for continuing and expanded business involvement.

Finally, P/PV sought to assess the impact of the school/business collaboration phenomenon as a vehicle for fostering school improvement, particularly as it affects the education of disadvantaged youth. The central questions were: What achievements were expected through the collaborations? Which were actually realized?

To meet these research objectives, P/PV examined nine nationally recognized school/business collaborations that employed a variety of approaches and had slightly differing objectives. This report uses findings from these assessments to promote an understanding of the scope and limitations of school/business collaborations.

SELECTION OF PROGRAMS

In constructing the study, we elected to sample a wide range of school/business collaborations rather than assess the effectiveness of a single model, such as the adopt-a-school approach. We also adopted several criteria that were designed to increase the relevance of the research choices to the larger questions facing school/business collaborations.

P/PV sought to study programs that serve disadvantaged youth and are at least nominally recognized as being strong interventions, i.e., strong examples of particular approaches. Thus, the report does not reflect the entire school/business phenomenon as it exists but discusses the phenomenon at its best when directed to at-risk youth.

The nine programs chosen for the study met the following general criteria:

> Continued operation for two or more years. Our reconnaissance efforts indicated that many collaborative programs were very new. Others had turned out to be short-lived. However, the programs in the study were well-established and had already passed through the learning stages that accompany any new initiative.
>
> A substantial portion of program participants who are educationally at risk and/or economically disadvantaged. Until recently, business/school programs were designed to serve educationally gifted youth. The P/PV assessment, however, is limited to programs that attract and effectively serve youth most likely to experience difficulty entering the labor force.
>
> Demonstrable and serious involvement by the private sector. These programs illustrate partnerships in which business involvement has been sustained and substantial.
>
> More than 50 participants. We did not want to draw conclusions based on efforts that had not at least shown modest potential for impact. Several very large programs were included in order to determine whether size had an effect on a collaboration's capacity to serve at-risk youth.

Application of these criteria resulted in selection of the nine programs listed in Table I.1. Brief summaries of the programs appear in Chapter III. At the time of selection, they were among the best-known programs serving at-risk youth, employed a variety of approaches, were relatively established and had substantial business involvement.

METHODOLOGY

P/PV's primary approach to assessing the nine programs was grounded in qualitative techniques: site visits, observations of program operations, structured and semistructured interviews, and reviews of program materials. Once we had selected the nine initiatives for study, site visits were conducted in 1985 and 1986. This report and the accompanying volume of profiles are

TABLE I.1

SCHOOL/BUSINESS COLLABORATIONS CHOSEN FOR INCLUSION IN P/PV'S ASSESSMENT

Off-Campus Work Study Program (St. Louis, Missouri)

New Horizons (Richmond, Virginia)

Teen Opportunities Promote Success (Birmingham, Alabama)

Philadelphia High School Academies
(Philadelphia, Pennsylvania)

Tenneco/Jefferson Davis Business-School Partnership
(Houston, Texas)

American Can (Primerica)/Martin Luther King, Jr. High School Partnership
(New York, New York)

Regional Occupational Centers/Programs
(State of California)

Atlanta Partnership of Business and Education
(Atlanta, Georgia)

Boston Compact (Boston, Massachusetts) based on observations of the programs as they existed at this time. Although we have attempted to make descriptions as current as possible, the rapidly evolving nature of these partnerships means that many subsequent changes are not reflected in our descriptions.

When available, descriptive and quantitative data were collected. In the two larger programs, more extensive quantitative efforts were undertaken in order to assess whether student outcomes improved as a result of the program. Nevertheless, there remains a paucity of reliable quantitative data on the outcomes and effects of these programs, a limitation that could not be overcome during the research period. Thus, our conclusions about the effects of collaborations on students and schools must be couched in cautionary terms.

ORGANIZATION OF THE REPORT

This report is presented in two volumes. This first volume presents analysis of the findings and assessments of the nine school/business collaborations in our field study. It draws heavily on but does not reiterate material from Volume II, which comprises the extensive profiles of the nine programs that form the primary evidence base. The remainder of this volume is organized as follows: Chapter II places the recent school/business collaboration phenomenon in the broader context of partnerships between education and business during this century. The chapter also describes findings from the reconnaissance efforts conducted in 1984. Chapter III characterizes the activities and interventions collaborative programs have undertaken, while Chapter IV reviews program management structures, noting the close links between the conditions that caused the partnership to develop and the organizational structure that was adopted. Chapter V describes the effects of school/business collaborations on students, schools, education in general and business participants. The volume concludes with a discussion of the implications of findings for existing school/business collaborative efforts and identifies a series of issues and policy options that such efforts will face in the future.

II. THE CONTEXT OF SCHOOL/BUSINESS COLLABORATIONS

The involvement of business in educational issues is not a new phenomenon. Business interest in schools has been a feature of educational reform throughout much of this century and is commonly thought to have begun with the vocational education movement.

Even before the turn of the century, business was involved in the establishment of tax-supported schools and mandatory attendance laws. (See Grubb and Lazerson, 1974, for a discussion of early business involvement in education.) As people migrated to the cities for work, the public schools were increasingly charged with civilizing and disciplining youth as well as educating them.

Industrial changes in the early 20th century led to a great flow of immigrants into the cities and a concomitant rise in school enrollments. This change spurred business to "vocationalize" common schools. Germany, then the chief manufacturing competitor of the United States, had oriented its education system to industry and American businessmen demanded that a similar system be instituted here. In 1917, Congress passed the Smith-Hughes Vocational Education Act, which provided funds for developing a parallel education system within the schools to prepare students for jobs in agriculture, the trades and manufacturing (Grubb and Lazerson, 1974).

After 1920, the business community's involvement in the public schools became less direct, yet it remained influential. (See Callaghan, 1962.) The "administrative progressives," a group of social reformers composed of businessmen and professional elites, sought to improve the schools' decision-making process and make systems more accountable. Professional managers or superintendents of school systems were hired as a result.

The influence of the business community on public schooling grew between the 1920s and the 1950s. Changes in electoral mechanisms opened the way for domination of school board membership by representatives of the business and professional communities. Although they were still popularly elected, school board candidates were forced to finance citywide campaigns. More and more candidates came from the upper or managerial class, purely as a function of this need for wealth. Still, they declared "representing public interest" to be their goal.

During the 1960s, collective bargaining by teachers and aggressive action by community and parent groups combined to reduce the business sector's role in the schools. The empowerment of teachers and parent groups crowded out business representatives. In addition, businesses began moving to the suburbs in greater numbers; growing numbers of employees lived there and their children attended schools there. Thus, business interest in urban educational issues declined. The distance between the business community and urban schools grew and a period of disaffection was underway (Timpane, 1982).

Since industry's need for highly trained labor was increasing during this period, the focus of business involvement in education shifted to the postsecondary level. This new focus was possible because the constant need for dependable, low-skilled labor was being filled by the entrance of women and youth into the workforce. Government-sponsored "manpower" programs, which provided on-the-job training to both high school graduates and dropouts, flourished during the 1960s and 1970s.

While the 1970s represent the peak period of community involvement in public schools, especially in urban areas, a low-key relationship between the business sector and the schools did persist. The schools developed multitrack systems to attempt to reflect work options students would face in the future. Assisting students in making those choices was the stated objective of the private sector's involvement with the public schools in the 1970s. These efforts were characterized as "career education" by their most vocal supporter, U.S. Commissioner of Education Sidney Marland.

Despite the continuing and varying relationship that had existed between schools and businesses throughout the decades, the basic institutional roles and responsibilities remained fixed. Businesspeople performed defined tasks in school districts, generally under the guidance of school personnel. This subordinate role reflected the concerns of teachers and school administrators, who saw education as their responsibility. Education was left to schools, while employment and production were left to business. Recently, however, the distinction has become less clear.

A CHANGING CLIMATE FOR BUSINESS PARTICIPATION

Toward the end of the 1970s, several factors coalesced to change the conditions under which schools and businesses interacted. First, the philosophy of the federal government shifted to active promotion of involvement of the business sector in delivering and overseeing what had been traditionally "public services." This philosophy is reflected in such areas as job training, where business' role in establishing and overseeing local employment and training programs has been greatly expanded under the federal Job Training Partnership Act (JTPA). Of particular relevance to the development of school/business partnerships was a challenge issued to businesses by President Reagan in 1982, which urged them to become involved in their community's schools.

A second, perhaps more critical factor that fostered increased business involvement in education was a sense of crisis in the urban public schools. Business representatives at virtually every program we studied cited three interrelated reasons for initiating a collaboration: a perceived deterioration in school quality, community dislocation or crisis, and a diminishing pool of qualified entry-level employees.

Perceived Decline in School Quality

In the late 1970s, perceptions of public education changed dramatically. Instead of being seen as the solution to community problems, American public education was being perceived as the cause of a variety of social and economic ills. Urban schools, in particular, came under increased scrutiny. They were characterized as massive bureaucracies plagued by high absenteeism and skyrocketing dropout rates; furthermore, even students who successfully navigated the school system and graduated were frequently seen as unprepared for employment. The release of the National Commission on Excellence in Education report, A Nation at Risk, was the culmination of the growing perception that schools no longer prepared students for productive employment or any social or public involvement that required functional literacy.

Although the educational decline was generally seen as the responsibility of the schools, some civic and business leaders believed that finding a solution would require a greater intensity of effort and resources than could be expected from the schools alone. However, the vast majority of these business leaders were not educators and had little if any experience with the urban youngsters whose plight now concerned them, either personally or institutionally. How business could make a difference became the central issue for these leaders.

Community Problems

Major urban trends helped create the problems that caused many collaborations to take root. Most troublesome were racial desegregation, demographic changes, high rates of youth unemployment and the increasing disparity between the economic outlook of the average American and that of the poor population.

Desegregation was a critical issue in most initiatives. Many communities experienced lengthy, divisive periods leading up to and following forced desegregation of the schools, but the effect of desegregation on school systems went far beyond the immediate rash of violence and discontent. The most significant effect of desegregation was a rapid flight of middle-class and working-class whites from urban school systems. Many white high school students either moved out of areas affected by desegregation or enrolled in the community's private and parochial school systems.

Most urban school systems experienced substantial decreases in student populations--many saw enrollment decline by as much as one-third to one-half. This loss of students, who were primarily from middle-class families, cost urban public schools some of their most consistent and effective advocates and reduced their tax base. School districts were often forced to reduce the number of available teacher slots, which left little opportunity for new teachers and administrators to enter the system. This lack of new blood, coupled with the absence of a strong constituency and the effects of a changing school population, jeopardized the school system's capacity to deliver effective education.

Scrutiny of the problems faced by schools led to an increased awareness that changes in society, such as the growth in single-parent families and two working-parent families, had further transferred responsibilities in counseling and disciplining students to the schools. Communities also became much more aware of near-crisis levels of alcohol and drug abuse, unwanted pregnancy and debilitating depression among youth. While schools and teachers were being called on to assume new responsibilities, business found itself in the position of having to complete the education of entry-level workers whose mastery of basic skills at hiring was not sufficient to allow them to perform their work. Many urban businesses, concerned about the implications of both the exodus of students from urban districts and the problem of educating those who remained, began to call for serious efforts to address the problems they saw.

A distinct, but related issue that affected the development of school/business collaborations was high unemployment among urban minority youth. In many urban communities, youth unemployment was regularly cited as a reason for business to become involved in partnerships. Unemployed youth were a drain on the community, it was argued, and high unemployment rates had both immediate and long-term consequences. The immediate danger was a return to the urban discontent of the 1960s and 1970s; the long-term danger was the likelihood of continued unemployment as more unemployed adults taxed the resources of the community.

Finally, a disjuncture was perceived between the improved business climate and the growing level of poverty among community residents. Business and community leaders alike said they saw a discrepancy between a revitalized business community and a school system and youth population that were not performing or achieving as expected. School/business partnerships were developed in an attempt to speed the "trickle-down" process that most public and private sector leaders envisioned occurring in a revitalized urban economy.

Diminishing Entry-Level Labor Pools

Another factor that helped stimulate the formation of school/business partnerships was a concern among businesses that the entry-level labor force was diminishing and changing. While the racial, ethnic and economic composition of communities changed, the personnel of major urban employers did not. The ranks of upper- and middle-management, in particular, remained the domain of white, middle-class males. Many employers realized that desegregation and other factors would eventually create a significant change in the racial and ethnic composition of the local labor force. Many also realized that their businesses were ill-prepared to effectively recruit and train the minority and poor population that would soon form the primary pool from which entry-level employees would be hired. Involvement in school/business collaborations provided them with an opportunity to address this concern and become active in the community.

Business leaders were also concerned that the poor quality of many schools meant fewer skilled workers, a condition that threatened America's competitiveness in world markets. It was becoming clear that solving the problem required renewed attention to the entire educational system. Businesspeople began to ask how they could help the schools, a question that did not lend itself to a single answer. The level of concern in the business community varied greatly from city to city. In some cases, it was fostered by a heightening sense of crisis; in others, it was a response to a call from individual leaders. Overall, it was clear that educational concerns had taken a place on many corporate agendas.

THE PRIVATE SECTOR'S NEW ROLE: RESULTS OF THE RECONNAISSANCE

When P/PV began its search for programs to study, collaborative efforts were being widely heralded as a source of school improvement. Our researchers expected to find a large number of programs from which they could choose those that best fit the study criteria. However, because the reputation of many efforts exceeded their accomplishments, the range of choices was much narrower than had been anticipated.

From a sample of programs that did fit our research requirements, we selected nine programs that reflect the broad range of approaches that appear likely to have an impact on at-risk youth. This method was employed to help us address the underlying questions of the study. Although there were thousands of school/business collaborations, our reconnaissance showed that relatively few targeted youth who are educationally at risk; fewer still offered a substantial approach to meeting the needs of such youth. A somewhat larger, though still limited number targeted those considered economically disadvantaged. Few collaborations addressed the problems of an entire school system, while a few more specifically targeted limited numbers of youth and many more matched individual schools with businesses in an attempt to upgrade a particular school. The following sections discuss the types of approaches we identified in our reconnaissance.

System as Target

The reconnaissance identified a small number of collaborative efforts that focus their efforts on entire educational systems, at either the local or state level. In most of these systemwide efforts, business contributions involve an infusion of new resources--grants, job opportunities, volunteers--and increased community support for public education and special programs for at-risk youth.

Included in P/PV's study are two programs that seek to affect all schools within an urban system--the Boston Compact and the Atlanta Partnership of Business and Education. They were selected because each shelters various individual collaborative efforts, some of which reach the large at-risk population within their communities. During the course of the study, a number of new systemic efforts have emerged, particularly in urban areas. While this is partly due to dissatisfaction with the scope and results of smaller efforts, it is also likely to be a result of the attention focused on the Boston Compact, the most highly publicized systemic initiative.

State-level systemic approaches are less common. Although much of the educational reform effort in the past decade has been conceived at the state level, few substantive statewide initiatives have been developed. Instead, statewide task forces designed to promote educational reform and coordinate existing programs have emerged. One such effort is the California Business Roundtable, a statewide organization of CEOs that funded a study on how to improve student performance in the state. Based on the findings of the study, several business leaders began lobbying for legislation to reform education. To increase business involvement in the schools statewide, the Roundtable compiled a catalogue of existing business/school efforts as models for future efforts. The Minnesota Business Partnership has undertaken similar statewide studies.

A statewide program with components that are considerably more substantive was included in P/PV's study. California's Regional Occupational Centers and Programs (ROC/Ps) was chosen for several reasons. First, its statewide scope provided an opportunity to observe a program whose scale and impact exceed those of other partnerships in the study. Second, unlike many of the other collaborations, it is funded and administered entirely by the state department of education, with the role of the private sector limited to providing work opportunities and curriculum advice. Meanwhile, the goals of the program--adequate vocational preparation and improved access to entry-level jobs--are similar to those of many of the other programs studied.

School as Target

The most frequently found type of school/business partnership is the pairing of an individual business and a school, a model found in every kind of school district--whether in an affluent suburb or an inner-city ghetto. The beneficiary of this pairing can be the entire school or specific classes within the school. Most major U.S. cities and many smaller ones have implemented programs of this type, which are generally known as adopt-a-school programs. A 1984 survey of 9,000 school districts conducted by the U.S. Department of Education revealed that of the 22 percent of districts having one or more active partnerships in their district, most were of the adopt-a-school type. Adopt-a-school efforts accommodate a wide range of business involvement and are attractive to businesses and schools that seek sporadic or limited contact; however, they can also evolve into serious and long-term relationships. In some instances, the pairing of a school and a business is made by a coordinator on the basis of the school's priority needs complementing the assistance a business is willing to supply. In others, the adoption may evolve from meetings between the two parties. The range of activities that occur under the umbrella of an adoption is wide. Companies may supply tutors, sponsor trips, contribute equipment or endow scholarships, employees may work with specific classes on special projects or undertake an activity that is open to the entire school population. The regularity of activities and the number of employees involved varies tremendously.

Several of the adopt-a-school programs we reviewed demonstrate how such efforts develop and the extent to which each partner can shape the program. Dallas' program, coordinated by the Chamber of Commerce, has matched almost all its schools with business partners who contribute funding, equipment, materials and volunteer assistance. St. Louis' Partnership Program operates out of the central school district but relies on individual teachers to design projects that use business resources to reinforce the curriculum. Many citywide partnerships give companies the opportunity to choose the school they adopt or the type of impact they would like to achieve. The Sara Lee Company, which participates in Chicago's adopt-a-school program, requested a "problem" school and has worked with the teachers and principal at Harper High School to develop after-school programs and special assemblies to enrich the school environment. It has also paid for a tutoring program for the students.

While the nature of adopt-a-school activities and the intensity of involvement vary greatly even within the same city, programs that pair businesses with schools tend to exhibit some combination of the following characteristics:

- Most contributions take the form of money or materials;

- Businesspeople may come into the schools to lend assistance with special programs or classroom projects, though usually for a short time;

- Classes that benefit from the partnerships have creative teachers who devise ways of incorporating business assistance into the classroom; and

- Tutoring is often the most sustained form of business assistance to the education of youth, but the type of assistance usually depends on the teachers' initiative rather than the youths' needs and may not continue from one year to the next.

Two programs that we chose to study are pairings of businesses and individual schools. One pairs the Tenneco Corporation with Jefferson Davis High School in Houston. The second, in New York City, matches Martin Luther King, Jr. High School with Primerica (formerly American Can Company). Both schools are primarily populated by youth who are both economically and educationally at risk. The two systemic collaborations included in this study--the Boston Compact and the Atlanta Partnership of Business and Education--also have components that pair individual schools and businesses.

Youth as Target

The largest number of programs that were appropriate for our study were programs that focus directly on specific youth. Resources made available through this type of collaborative effort are used exclusively for a particular population. Our reconnaissance effort uncovered many programs that use a similar model to serve youth who vary in ability and achievement levels, ranging from gifted students to potential dropouts.

1. High Achievers. Businesses are often anxious to support "winners," youth who have done outstanding work and show signs of accomplishing something exceptional. Targeting of such youth often begins within the context of a schoolwide partnership, but the awards, scholarships or jobs that a business is willing to offer convert the program to a targeted effort. For example, the North Carolina High School of Science and Math, a statewide school for talented math and science students, has been able to attract extensive business support both in donation of equipment and provision of

summer jobs. Since our interest was to study programs that serve educationally at-risk youth, we did not select programs from this category.

2. Underachieving Students. Many businesses have exhibited a willingness to assist youth, particularly minorities, who have demonstrated academic potential either on standardized tests or in some of their school work but seem to be performing below their capabilities overall. We uncovered a number of programs funded by a coalition of businesses that provide assistance, including after-school and summer programs, jobs and mentoring, to youth who are talented in science and technology. Their purpose is to ensure that such students seek further education or find appropriate jobs.

   One of the oldest examples of this type of program is PRIME, begun in Philadelphia by a coalition of representaives from the higher education and business communities who were distressed by the dearth of minority candidates with an interest in or the qualifications for pursuing education or careers in science and math. Once students become part of PRIME, they receive academic, vocational and financial support for the remainder of their high school careers. Youth are selected in their early teens, a time when decisions are made that may determine the direction of their future.

   Another program that targets underachieving students, though not exclusively minorities, is the Shearson/American Express Financial Academies. Currently in place in five New York City high schools, the program admits students who have test scores that indicate academic potential but are not achieving in school and have poor attendance records. The program combines extra classes and special activities during the school year with unsubsidized summer jobs in the financial industry.

   To represent programs for underachievers, P/PV chose to study St Louis' Off-Campus Work/Study Program. This school/business collaboration aims to assist youth who are meeting most academic requirements but lack direction for the future.

3. "Average" Students. This category includes high school students who are passing their courses, usually with average grades, but are unprepared for the working world. Business intervention is designed to increase the youths' motivation and prepare them for available jobs, thus supplying businesses with qualified workers.

A number of programs that serve average students combine classes and work experience. These programs, which usually require students to maintain passing grades, teach students to function in the workplace through class instruction and provision of after-school and summer jobs. These programs often target economically disadvantaged youth, who may come from homes where parents have not held regular jobs and cannot teach them about job-appropriate behavior. These youth need jobs and their low income level frequently allows the program to take advantage of federal funding through the JTPA.

The model for "average student" collaborations is the cooperative education program that has long been a staple of comprehensive high schools. Cooperative education provides students with work experience in a specific vocational area during high school. Business' role in such programs has been to offer advice on the appropriate curriculum for each vocation, donate equipment and provide part-time jobs. One important difference between cooperative education and more recent collaborative efforts is that cooperative education is targeted to specific vocations and offers intensive instruction in skill areas. As a result, admission standards are usually higher than those of "average" student programs. Students also enter cooperative programs early in their high school careers and are trained for three to four years in a special program, a much longer period of training than provided by school/business collaborations we observed.

Programs that target youth directly, using jobs as a major incentive for participation, are popular forms of business assistance to youth who are economically disadvantaged. P/PV studied two such programs, New Horizons in Richmond and TOPS in Birmingham. In both programs, youth are progressing through school but lack the skills, confidence or motivation to obtain jobs on their own.

4. At-Risk Youth. There are few collaborative ventures that focus on students who are considered at highest risk of dropping out of school, i.e., those whose grades place them in the lowest quartile of their class and who have repeated several years of school. Since students in most states can leave school once they turn 16, efforts that have been made have attempted to reach at-risk youth when they enter high school. The best-known model is the vocational academy. The most prominent applications of this model are the High School

Academies in Philadelphia, which were included in our study, and the Peninsula Academies in California. Although the requirements for admission are generally less stringent than for the programs described earlier, students are expected to attend school regularly once they are accepted. Involvement of business in academies can include membership on advisory committees that oversee curriculum and organization of the program, donation of up-to-date equipment and hiring of students for after-school or summer work.

CONCLUSION

While collaborations between schools and businesses are not new, the relationship has evolved to a new level in the last 15 years. The current wave of partnerships was impelled by a number of community crises and problems that increased concern over public education, such as a decline in school quality, school desegregation and diminishing labor pools from which to recruit entry-level employees. The response by business leaders has been to offer support in the form of donations, part-time jobs, volunteers and political support.

School/business collaborations can be classified according to their focus of activity. Many collaborations focus their efforts on school systems or specific schools within a system. These efforts assist at-risk youth as part of the overall school population but often include special programs or components specially designed for at-risk youth.

Other programs focus their efforts directly on youth. Some serve a set of youth deemed "at-risk" because of economic disadvantage or academic deficiencies and design programs explicitly to meet their needs. Such programs intensively serve limited numbers of youth, emphasize personal attention and offer work experience to most participants.

P/PV's study includes examples of all types of school/business collaborations, including those targeting entire systems or individual schools and those that serve individual students. The examples selected were mature programs that served moderate to large numbers of youth and had substantial involvement by businesses.

III. WHAT THEY DO AND WHOM THEY SERVE

Collaborations between schools and businesses have adopted a variety of structures and approaches. Some seek to serve a well-defined set of youth, emphasizing work maturity skills and direct work experience; others attempt to reach a broad range of youth by developing programs that serve an entire school or school district.

Programs seeking to address the problems of specific youth emphasize work maturity training and work experience as their principal components. In addition, several student-focused programs have developed basic skills and vocational training approaches to improve the skills youth bring to the job market. In general, these student-focused approaches identify specific employment deficiencies and attempt to remedy them.

Other programs focus on improving whole schools or systems. Often, the goal of such programs is to improve attendance and graduation rates and overall academic achievement in a school or district. By doing so, the interventions expect to increase the employability of all youth graduating from the school or district.

In both types of collaborative effort, we find the companies that become involved share three common characteristics. First, most are large corporations, either locally based or part of a national organization with a mandate for involvement in local programs. Second, most are either service industries, such as banks and insurance companies, or national headquarters of large corporations. These are institutions that usually hire large numbers of entry-level clerical workers; as a result, most jobs offered through collaborative programs are clerical and most of the students served are female. Third, little or no rearrangement of operations on the part of business is necessitated by their participation. Companies that support collaborations with schools offer part-time jobs, allow employee involvement in program activities and partially underwrite program costs without significantly affecting normal operations. The companies are generally large enough to allow executives and employees to fully participate in the programs, to absorb a limited number of students in part-time jobs without upsetting production and to commit financial resources to the program as part of corporate philanthropy.

TWO BASIC APPROACHES TO COLLABORATIVE PROGRAMMING

The collaborations chosen for this study are not representative of all school/business collaborations, since we have limited our scope to programs that serve high school youth who are for academic or financial reasons at risk of dropping out of school. School/business collaborations that serve this population fall into two categories that are not always mutually exclusive: student-focused programs and systemic programs, which can be school-focused or system-focused.

Student-Focused Programs

Student-focused programs aim their support at helping well-defined groups of youth make the transition from school to work. In general, these programs identify deficiencies that restrict a youth's entry into the job market and develop program components to remedy those deficiencies. The programs that we studied in this category are: the Off-Campus Work/Study Program (St. Louis), Teen Opportunities Promote Success (Birmingham), New Horizons (Richmond) and the Philadelphia High School Academies. The programs share a number of characteristics:

- They operate apart from the normal school setting by holding classes and program activities exclusively for participants, sometimes away from the school, and usually by employing specialized curricula.
- They strictly define target youth and screen them carefully. Most youth-focused programs require that students display some degree of academic ability, good attendance and an interest in joining the program. However, there is considerable variance in the criteria used.
- They serve small groups of students, emphasizing individualized attention through close contact between students and instructors. Many student-focused programs serve fewer than 100 students each year. The Philadelphia Academies serve more than 1,200 students, but do so in 10 different Academy settings.
- They emphasize development of employability. They provide considerable training in work maturity skills and offer direct work experience through part-time and summer jobs to virtually all participants.
- Most serve students for a brief time, often restricting participation to students in their junior or senior year of high school. To a great extent, this restriction is mandated by the minimum age requirements for placing youth in after-school work. The Philadelphia Academies, which integrate work experience into a larger

academically oriented approach, serve students for longer periods of time, often from their entrance into high school.

School- or System-Focused Programs

The distinguishing characteristic of a student-focused collaboration is the provision of services directly to a well-defined, carefully recruited set of students. In the second type of collaboration, efforts and resources are directed more broadly--to teachers, schools and entire districts. Most systemic programs include student-focused components, but those components exist as part of a larger school- or system-directed initiative.

School- or system-focused programs generally evolve from the actions of an individual or group within a corporation seeking a way to help schools in trouble. Since the program develops from their personal concern, these businesspeople often play a very active role in program design and management and may continue their involvement in an advisory or participatory capacity once the program is implemented. Business participation also involves contributions of money, volunteers or advice. A set of mutual goals is often developed at the outset.

Unlike most student-focused programs, most systemic or school-directed program sites P/PV visited had business sponsors who did not wait to be asked to become involved but expressed a willingness to assist schools in improving the quality of education on their own. In some respects, this type of program comes closest to meeting the definition of a true public/private partnership--a situation in which business leaders recognize that the quality of education is important to them. Systemic programs in our study include partnerships between Primerica and Martin Luther King, Jr. High School and between Tenneco and Jefferson Davis High School, as well as the Atlanta Partnership, the Boston Compact, and the Regional Occupational Centers and Programs.

Tenneco's partnership with Jefferson Davis High School includes a variety of components--some are directed exclusively at the students, others at the faculty, and still others at raising school morale. Tenneco's contributions to the school include provision of mentors and tutors for students and grants for teachers, and sponsorship of schoolwide awards and contests.

The Boston Compact, a collaborative program that can be defined as systemic, was created under conditions similar to those of the other programs described. The school system was losing many of its youth prior to graduation and was graduating others who were ill-equipped to fill even entry-level jobs. Business feared the ultimate effect of these conditions on economic prosperity and the quality of life in the city. Hence, a "compact" was struck between schools and businesses. The initial commitment centered on jobs; however, in an effort to signal a new type of relationship between the business community and the schools, specific hiring goals for business and measures of educational improvement for schools were built into the agreement. Not only has the number of jobs available to Boston public school students increased, business support has also expanded, as some businesses have strengthened their individual partnerships with schools and/or instituted a scholarship fund to encourage postsecondary education. The business community also cosponsored a conference on reducing the dropout rate.

PROGRAM ELEMENTS

Since collaborative programs were often developed as adjuncts to regular school curricula or employment and training programs, they generally have not had to conform to educational or governmental requirements. Instead, they have evolved from the interplay of the needs of the participants, the availability of resources, the interests of the businesses and often, the initiative of influential individuals. Nevertheless, program elements usually include some variation of three intervention strategies that past research and operating experience indicate are particularly important to increasing educational and employment opportunities for at-risk youth. In our study, the presence or absence of these strategies served as an indicator of the extent to which individual programs had the potential to affect the opportunities of participating youth.

The three critical strategies are: vocational training and work experience (work-readiness), remediation and basic skills training, and general school improvement.

Work-Readiness. Vocational training and direct work experience have been cited by numerous reports and studies (National Research Council, 1983; Public/Private Ventures, 1982, 1983; Mallar, et al., 1978, 1980) as providing a number of benefits. Training provides better access to jobs. Work experience demonstrates a youth's willingness and ability to work, making him or her a more attractive candidate for employment. Work opportunities are cited by the NRC (1983) as an important tool for recruiting and retaining disadvantaged youth in long-term programs.

Remediation and Basic Skills Training. In its study of national vocational education, NRC (1983) notes that remedial and basic skills training is essential in any program designed to help at-risk youth successfully enter the labor force. The study emphasizes that focusing solely on vocational skills or work experience excludes youth who do not have the reading and computing skills necessary to complete the program or obtain employment.

School Improvement. Improving school quality has become a top priority in the 1980s. The release of A Nation at Risk by the National Commission on Excellence in Education, along with numerous other reports on schools (Boyer, 1983; Goodlad, 1984; Kozol, 1984; Powell, et al., 1985; Committee for Economic Development, 1985, 1987), has painted a portrait of a national educational system in disrepair and has placed educational reform on the national agenda. It is within this context that new alliances between schools and other sectors of the community have developed. Among the hallmarks of general school improvement are increased student and teacher morale, decreases in dropout rates and increases in academic performance.

As we studied each program, we were especially interested in determining the extent to which each applied these three components. Table III.1 provides summary descriptions of each intervention's key program components, target population and business interest.

Work-Readiness

Each collaboration in P/PV's study seeks to assist students in making the transition from school to work. The most apparent common element of the programs studied is a component intended to prepare students for entry into the labor force. Programs generally offer students a variety of experiences designed to raise their awareness of the range of opportunities available to them, the relationship between educational activities and job-readiness, the way to find and secure a job, and the expectations they will encounter in the workplace.

Some programs, including TOPS, New Horizons and Atlanta's Adopt-A-Student project offer preemployment classes or seminars to acquaint students with what will be expected of them when employed. Others, including the Regional Occupational Centers and Programs, the Off-Campus Work/Study Program and the Philadelphia High School Academies, incorporate this type of training into vocational and academic classes. Emphasis is placed on "job maturity" issues, such as proper attitude, showing up on time for work and appropriate dress. In many programs, job maturity classes are taught by program staff or teachers, but in many others, businesspeople deliver the message personally, citing experience as both employees and employers.

Most programs also seek to acquaint students with the availability and requirements of jobs, either in specific industries or in the community. TOPS, New Horizons, Tenneco and the Off-Campus Work/Study Program all run job fairs to acquaint students with area employers who may be willing to give them jobs. Many programs also take students on field trips to company offices to give them a "feel" for working there. Local corporate personnel

TABLE III.1 PROGRAMS STUDIED AS PART OF SCHOOL/BUSINESS COLLABORATION PROJECT

Student-Focused Programs	Key Program Components	Selection Criteria and Number of Youth Served	Business Involvement
OFF CAMPUS WORK/STUDY PROGRAM (Careers in the Classroom): St. Louis (1968)	Emphasis placed on preemployment skills and work behavior Students attend classes at the worksite in space provided by employer; students work during afternoon. Year-round program.	Seniors only 150-200	Business provides part-time jobs and classroom space. Those involved are 5 large St. Louis corporations, a consortium of area banks and the city government.
NEW HORIZONS: Richmond (1980)	School-year classes emphasize work maturity; some basic skills classes during summer. 24-month program including summers.	11th- and 12th-graders, JTPA-eligible, 80 % attendance, "C" average 50 year-round and 60-70 during summer	Business provides part-time jobs with considerable on-the-job supervision. Approximately 17 businesses in Richmond are involved.
TEEN OPPORTUNITIES PROMOTE SUCCESS (TOPS): Birmingham (1981)	Separate summer and year-round programs are offered. Both summer and school year classes emphasize work maturity, career awareness and job search skills. Afternoon employment during school year and summer.	Junior and seniors with "C" averages, strong attendance records, JTPA-eligibility, and lacking skills needed for employment. 45 year-round; 110 during summers	Business assists in program management and 74 area businesses hire students.
PHILADELPHIA HIGH SCHOOL ACADEMIES: Philadelphia (1969)	Four academies: Business, Electrical, Automotive and Health. Structured curriculum with few electives. Emphasis on integrating both vocational training and basic skills in all courses. Students eligible to work during junior and senior years. Four-year program housed within comprehensive high schools.	Youth are drawn from host high school service area. Criteria: low academic achievement (below grade level skills in reading and math), test scores between 20th and 50th percentile within district, interest in vocational area and moderate to good attendance. Academies are sited in 10 high schools. 1,200 to 1,500 enrolled	Business provides substantial financial support, service on curriculum and program advisory boards, provision of jobs, service on "school teams" and part-time jobs for juniors and seniors. Supporters include many of the largest companies in the city. Over 100 businesses are involved.
School- and System-Focused Programs			
PRIMERICA/MARTIN LUTHER KING, JR. HIGH SCHOOL PARTNERSHIP: New York City (1982)	Enhanced adopt-a-school program involving awarding grants to the school for educational and school spirit activities and sponsoring special programs. Some individual mentoring by employees.	All students in high school eligible to participate. About 300 students directly participate in any partnership activities. Total school population: 2800	Substantial financial support from Primerica. ($350,000 over four years).

TENNECO/JEFFERSON DAVIS HIGH SCHOOL PARTNERSHIP: Houston (1981)	Enhanced adopt-a-school program involving substantial participation by employees as mentors, teachers aides and counselors. Considerable corporate involvement for school environment improvement. Summer job placements in nonprofits funded by Tenneco. Employability workshops.	Entire school benefits from program. 100 juniors/seniors are placed in summer positions as one part of the program. School size: 1200	Tenneco involvement is substantial both financially ($625,000 over four years) and in terms of volunteering by employees. More than 100 volunteer mentors.
REGIONAL OCCUPATIONAL CENTERS/PROGRAMS: State of California (1968)	Supplemental vocational education system allowing students to take vocationally oriented courses across normal school district boundaries. Some in-class work maturity training. Individual job placements as part of cooperative education component.	All students (and adults) aged 16 or older are eligible. 270,000 youth served 30,000 adults	Business involvement includes service on local advisory boards, provision of work/study opportunities. Business also is the source for many instructors and often provides access to corporate facilities and equipment for classroom and training.
ATLANTA PARTNERSHIP OF BUSINESS AND EDUCATION: Atlanta (1981)	Umbrella, coordinative body to oversee activities of a variety of school improvement and assistance activities. The Partnership runs several programs directly, the most important of which is the citywide Adopt A School program. It also supports a citywide Adopt-A-Student program.	All students in Atlanta public schools may benefit from Partnership. Adopt A School program encompasses 103 schools and programs. Adopt-A-Student program serves about 150 to 200 poorly performing seniors each year.	Partnership's Board of Directors is composed of leaders of major Atlanta businesses. Through the Adopt A School program, businesses are paired with individual schools and programs offering monetary and in-kind contributions. Through the Adopt-A-Student program, individual businesspeople are recruited to serve as mentors.
BOSTON COMPACT: Boston (1982)	School improvement initiative implemented by (1) setting specific academic performance standards for the schools and (2) setting specific employment objectives for the Boston corporate community. Key features include a specialist in high schools to match students with jobs, a school development officer to coordinate school improvement efforts and secure resources from the community, and individual partnerships between schools and businesses.	17 high schools involved 1500 youth hired in summer of 1984, 750 permanent hires in 1985.	As part of its agreement with the Boston schools, businesses provided initial leadership for the intervention. It supplies scholarship support, offers in-kind contributions through individual school partnerships, offers substantial numbers of part-time and summer jobs and serves as a constituency of public education.

officers are invited as guest speakers to describe available positions.

As part of work-readiness activities, many programs help students prepare resumes and practice interviewing. The Philadelphia Academies require students to prepare resumes during their junior year; program counselors meet with students individually and arrange for them to speak with area businesspeople in "mock" interviews. The Boston Compact uses in-school career specialists, who are employees of the area Private Industry Council, to review students' resumes and conduct classes on interviewing. To provide continuing support, job counselors in many programs monitor students' progress in their part-time, after-school or summer jobs and in their initial placements after graduation. Counselors keep in touch with both students and their supervisors in order to offer encouragement and advice and to identify and remedy problems before they jeopardize the students' jobs.

Vocational Training

Despite the fact that most programs aim to establish a link in students' minds between attending school and getting a job, actual vocational training is a regular component of only three of the programs studied--Philadelphia High School Academies, the Off-Campus Work/Study Program in St. Louis and the Regional Occupational Centers and Programs (ROC/P) throughout California. One component of the Primerica/Martin Luther King, Jr. High School partnership in New York is a security guard training course; however, only about 30 students per year participate in this training.

Traditional high school vocational education programs are usually not available to the disadvantaged youth served by the programs in our study, since the selection criteria for vocational education generally exclude students who are academically at risk. Furthermore, the decision to apply for vocational programs must be made early in a student's high school career. Thus, a vocational student will have already begun planning for the future, an occurrence that is not characteristic of an at-risk population. Therefore, while most initiatives in the study seek to place students in jobs during and after the program, few have vocational training components that prepare students for specific positions.

Even in the programs that do include vocational training, the organization or requirements of that training have been modified to better serve disadvantaged youth. The ROC/P, for example, offers a wide variety of courses in which students can enroll for a single semester or a year. In only a few areas does the program offer enrollment in the type of long-term program that is typical of standard vocational education. The duration of the courses and the absence of entry requirements other than age allow the program to serve a greater number of students.

The Off-Campus Work/Study Program is another collaboration that includes a modified vocational training component. Vocational training is confined to high school seniors who have maintained passing grades and is closely linked to the job they perform.

The Philadelphia High School Academies' approach most closely resembles that of traditional vocational programs. Because of its target population, however, the program has been modified to integrate academic and vocational education where possible and to extend through all four high school years. Students are not placed in jobs until junior or senior year, when their skill level begins to catch up with employers' requirements.

Direct Work Experience

Part-time or summer work experience is the centerpiece of most programs. Most students are placed in private sector positions as part of the program; the jobs are usually offered by business supporters in their own companies. Several programs, including those in Birmingham, Richmond, Philadelphia and Boston, have dovetailed their summer placement activities with local youth employment programs. In the adopt-a-school programs in New York City and Houston, the business partner either arranges for a subsidiary to hire students or subsidizes the employment of students by area nonprofit organizations.

Work assignments are usually clerical positions. Filing, telephone reception, light typing and related tasks are typical jobs that students obtained through these programs. To a great extent, the nature of the tasks is determined by the major activities of employers, who are usually insurance or banking companies or national corporate headquarters.

Student wages are generally pegged at federal minimum wage levels. Although some companies hire student workers at the wage level associated with the position and grant wage increases based on length-of-service, this practice is the exception rather than the norm.

Remediation and Basic Skills Training

Contrary to what one might expect, basic skills remediation is not a central component of most partnerships. An exception is the Philadelphia Academy model, which integrates both basic and vocational skills training in its curricula. Academy teachers in vocational areas use vocational activities to reinforce mastery of basic skills, while instructors in basic skills courses use vocational examples and materials to make reading, writing and math more interesting or relevant to students.

In four other programs, limited components have been developed to address weaknesses in speaking, writing or computing that students have demonstrated on the job. New Horizons and TOPS offer special classes designed to address reading or computational deficiencies. Similarly, Tenneco volunteers tutor students designated by teachers as in need of remedial attention. As part of its mandate to improve overall student performance, the Boston Compact has undertaken a series of programs to improve the reading and math skills of its students. Although most of these efforts involve regular school personnel, business and university partners often provide volunteers for individual tutoring. However, these efforts are not a major part of the programs' activities.

General School Improvement

Intervention strategies directed at general school and educational improvements are found in both student-directed and systemic collaborations. Among these strategies are donation of equipment and resources to schools, activities designed to improve vocational training, efforts to improve school and student morale, and attempts to reduce the dropout rate.

Contributions

In most school/business collaborations, business contribution of equipment or funds is a primary feature. This is particularly true of the larger initiatives in our study. Businesses donate or pay for new equipment and materials in the adopt-a-school programs in Atlanta, Boston, Houston and New York. Equipment donations are also a feature of the relationship between the Philadelphia Academies and some of their business supporters. Providing access to state-of-the-art equipment and teaching facilities is another way in which businesses support schools--not only in the aforementioned programs, but in California's ROC/P and St. Louis' Off-Campus Work/Study Program as well. Direct cash contributions to schools are also reported in these programs. In contrast, equipment and cash contributions do not play a central role in the smaller New Horizons and TOPS programs, though business support is obtained to help administer the programs.

Improved Vocational Training

Several programs sought to revise or amend vocational curricula in order to address particular student needs. Both the Regional Occupational Centers/Programs and the Philadelphia Academies, for example, offer stand-alone curricula to prepare students for jobs. The California program uses up-to-date equipment, industry-trained or experienced instructors, and industry-reviewed course materials to train students for a variety of very specific occupations.

The Philadelphia Academies adopted a highly integrated approach for their program. Industry advisors were consulted in the design of the vocational training materials and were also queried about the basic skill needs of entry-level employees. The Academy curricula encourage academic teachers to use vocation-relevant materials in their classes and foster the reinforcement of basic skills in the vocational segments of the program. As previously mentioned, other programs that emphasize job maturity have also consulted business advisors for assistance in improving student's employability, resume-building and interviewing skills.

Improving Morale

Among the common elements of school- or system-directed programs are activities that increase school pride and student morale. A variety of one-time and sustained activities are used to do this. The following examples reflect the wide range of one-time activities observed in our study:

- Painting, refurbishing of school facilities and grounds (Tenneco/Jefferson Davis High School);
- Visit by the chief executive officer or entire corporation board to meet with school officials and conduct normal corporate business on the school grounds (Martin Luther King, Jr. High School/Primerica collaboration and the Boston Compact);
- Sponsoring a celebration on the occasion of the 60th anniversary of the school (Tenneco/Jefferson Davis High School); and
- Sponsoring special awards ceremonies for students, teachers and classes (virtually all programs, including those that are student-focused).

Among the sustained activities programs undertook to boost school and student morale were subsidizing special trips, cultural assemblies and arts programs; sponsoring school clubs and athletic programs; publishing school newspapers; and distributing such articles as mugs, jackets and shirts, each decorated with the school's name and an announcement of its partnership with the private company.

Although not a direct focus of most partnership activities, improvement in teacher morale was observed in most, if not all programs. However, it displayed itself in markedly different ways in the two types of program models. Teachers in student-focused programs often assume new roles and responsibilities, which they perceive to be rewards of the program. They report great satisfaction in serving as mentors for youth, developing job opportunities for program participants and working with other people in the community on behalf of the program. In systemic programs, teachers are rewarded for their performance as teachers and tend to identify with their home school.

Teachers in the four student-focused programs in our study--New Horizons, TOPS, Off-Campus Work/Study and Philadelphia Academies --cited three morale-boosting benefits: the opportunity to work collaboratively with other professionals, the opportunity for enhanced professional development and the chance to provide more intensive services. These expansions of the teachers' roles were seen as the most professionally rewarding aspect of the student-focused programs.

A different kind of morale boost is provided in the school-directed models, most notably the Tenneco and Primerica partnerships, which increase teacher satisfaction primarily through public recognition, monetary benefits and similar rewards. In the Tenneco program, for example, teachers are honored at twice-yearly luncheons in the corporation's executive dining room; there are also formal teacher-of-the-month and teacher-of-the-year awards. Teachers at Jefferson Davis can also apply for small cash grants for needed classroom materials and request a classroom aide. Similar programs have been instituted at Martin Luther King, Jr. High School.

School-directed programs also improve teacher morale by encouraging greater involvement of teachers in decision-making processes and through programs to augment professional development. Jefferson Davis teachers were invited to a summer retreat where the partnership concept and plans were presented.

System-directed programs also make explicit provisions for involving teachers. In the Atlanta Partnership, activities include the administration of the Rockefeller Foundation's Distinguished Scholars/Humanities Program, which supports cooperative programs between university faculty and school teachers. In Boston, teachers and other school personnel cite the relationships they form with professionals throughout the community as one of the major direct benefits of the Compact. Furthermore, teachers and other school personnel are integral members of the Boston school planning teams that set the agenda for school improvement, and a grants program has been established under the Compact to support new curricula and projects developed by teachers. Boston teachers may also apply for direct scholarships to continue their training. As in the two adopt-a-school programs, teachers in Boston are given extra funding for materials and class trips.

Dropout Prevention

Few collaborations were initiated with the explicit goal of preventing students from dropping out. (The Philadelphia Academies are one exception.) However, as high dropout rates became a concern in their communities, several programs, including the Boston Compact, the Off-Campus Work/Study Program and the Adopt-A-Student component of the Atlanta Partnership, were identified as potential resources for addressing the problem. Other programs, while not explicitly identifying dropout prevention as a primary goal, support school efforts to address warning signs of dropout behavior. These include programs with components designed to increase average attendance or provide mentoring and tutoring assistance to students having academic difficulty. Most programs also seek to improve the school environment or ambience as an indirect method of keeping students in school.

The greatest obstacle to comprehensive dropout prevention in most collaborations is that their efforts are directed primarily at older students--those in their junior or senior year. Many at-risk students have already left school by that time. Of the student-focused programs in P/PV's study, only the Philadelphia Academy serves students in the 9th and 10th grades.

Among system-directed programs, most efforts are directed toward students old enough to work. For example, California's ROC/P is designed for students older than 16; administrative approval is required for younger students. Atlanta's Adopt-A-Student program focuses on the bottom quartile of seniors. The Boston Compact and the Tenneco/Jefferson Davis High School partnership have special programs for younger dropout-prone students, but the bulk of their efforts are directed toward older youth.

In seeking to reduce the dropout rate among juniors and seniors and, more infrequently, among younger students, the collaborations have increasingly emphasized three approaches:

> Individualizing the School Experience. Most programs maintain a lower student-to-teacher ratio than the system they serve. Many have also taken steps to increase the number of adult contacts students have by implementing a variety of mentoring, counseling or advisory programs. Several programs have personnel contact students who are late or miss school in order to emphasize the importance of attendance. Students in these programs know that teachers and program operators notice their absence.
>
> The Incentive of Work. Most programs underscore their commitment to graduating students by denying students the opportunity to work if they do not attend classes.

They ask students' employers not to allow the students to work on days on which they skipped classes.

Increasing Daily Attendance. Most schools and programs have adopted a variety of tactics to encourage youth to attend school regularly. In addition to emphasizing the link between attendance and work, many programs have established attendance and performance awards to recognize student achievement. In addition, several programs provide incentives for teachers, schools and districts to improve school attendance.

WHOM THEY SERVE

Few programs identified during the reconnaissance specifically sought to serve disadvantaged youth and those few varied in their definition of "disadvantaged." Some focused on academic deficiencies in targeting "at-risk" youth, meaning youth identified as in danger of either dropping out or failing to make a transition to work after graduation. Others concentrated their efforts on youth whose primary disadvantage was economic. The extent to which programs exclusively served disadvantaged youth also varied. A few programs applied rigid entry criteria; some were designed to serve disadvantaged youth only as part of a larger initiative. Since the core of many of these programs is a job, imposed restrictions limit the number of at-risk youth who can be served. First, youth must be at least 16 years old; second, those most at risk may be unable to satisfy the requirements of working in a private firm.

Table III.2 summarizes the characteristics of the youth affected by these interventions. With the exception of California's ROC/Ps, each program serves a population with significant economic or academic limitations. The majority of participants in the programs are minority students.

Two general approaches that are taken to serving a disadvantaged population are apparent. The first is to specifically target disadvantaged students by establishing recruitment or selection criteria. The five programs in the study whose approach involves targeting include TOPS, New Horizons, the Philadelphia Academies, Off-Campus Work/Study and the Adopt-A-Student component of the Atlanta Partnership.

In the case of New Horizons and TOPS, students must have enough high school credits to have junior (New Horizons) or senior (TOPS) standing, have no less than a "C" average, have at least

TABLE III.2

INDICATORS OF STUDENT DISADVANTAGE AND RACIAL CHARACTERISTICS ACROSS NINE SCHOOL/BUSINESS COLLABORATIONS

PROGRAM	ACADEMIC	ECONOMIC	RACIAL/ETHNIC COMPOSITION
OFF CAMPUS WORK/STUDY PROGRAM (Careers in the Classroom): St. Louis	Average students but without skills to enter job market or lacking direction to complete school	Probably drawn from low-income families	Majority are minority
NEW HORIZONS: Richmond	"C" average with good attendance record	95% JTPA-eligible (59% of district eligible for school lunch programs)	More than 95% black
TEEN OPPORTUNITIES PROMOTE SUCCESS (TOPS): Birmingham	"C" average with good attendance record	80% JTPA-eligible	More than 95% black (85% of school district black)
PHILADELPHIA HIGH SCHOOL ACADEMIES: Philadelphia	At entry, 73% in bottom quartile in math skills or reading comprehension; 35% in bottom quartile in both	Program records indicate that 60-70% are certified as disadvantaged	85-95% black, depending on Academy
PRIMERICA/MARTIN LUTHER KING, JR. HIGH SCHOOL PARTNERSHIP: New York City	60% school dropout rate, over half of students two or more years behind in reading. Only 77% passed state graduation competency tests.	Large majority disadvantaged	100% minority
TENNECO/JEFFERSON DAVIS HIGH SCHOOL PARTNERSHIP: Houston	School rated among bottom 2 or 3 among 27 Houston high schools based on standardized tests. Low attendance.	Majority are likely to be eligible for JTPA but only one-third apply	100% minority
REGIONAL OCCUPATIONAL CENTERS/PROGRAMS: State of California	Open to all students 16 or older	Not available	Not available
ATLANTA PARTNERSHIP OF BUSINESS AND EDUCATION: Atlanta	Adopt-A-Student targets bottom quartile of junior and senior classes. Most students enrolled in schools with Adopt A School programs.	85% of all students in system eligible for school lunch programs	90% black
BOSTON COMPACT: Boston	Systemwide high school median testing results (including premier examination schools) 20 to 30 points below national norms. 40-45% dropout rate.	Not available	73% minority

an 80 percent attendance record in high school and meet local JTPA eligibility requirements.[1]

Other targeted programs investigate the academic and personal needs of students to determine who will participate in the program. St. Louis' Off-Campus Work/Study Program is open to seniors who are either those impatient to make the transition from school to work or those counselors and teachers believe need an alternative high school approach to ensure graduation. The Adopt-A-Student program in Atlanta is designed to serve seniors in the bottom quartile of their classes. Although selection and nomination techniques vary across schools and counselors, the Adopt-A-Student program targets students experiencing difficulty in their final year of school. In addition to serving an academically disadvantaged population, programs in St. Louis and Atlanta actually serve an economically disadvantaged population, even though income is not used as a criteria for admission. Each is located in a school district with a population that is predominantly economically disadvantaged.

The remaining targeted program in our study, the Philadelphia Academies, was explicitly designed to serve students at risk of dropping out. Academies seek students who have moderately good attendance records and some interest in the vocational area being offered but are three or four years behind grade level in basic skills. As a rule, Academies recruit students who score between the 20th and 50th percentile in standardized reading and math tests.[2] Academy staff report that most of their students are also economically disadvantaged, using JTPA and subsidized school lunch criteria.

The second approach to serving at-risk students is to do so as part of a larger initiative serving a school or school system where a substantial number of students are disadvantaged. In these broadly targeted programs, the basic assumption is that most, if not all students in the school, district or system have a combination of academic, social and economic problems that put them at risk in school and will eventually hurt them in the labor market. Both Primerica and Tenneco are paired with high schools whose population is marked by subpar academic performance, as indicated by attendance, achievement and graduation rates. In addition, the high schools serve a student population that is economically disadvantaged.

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[1] New Horizons expects that at least 95 percent of all students in the program meet JTPA family income requirements; TOPS requires that 80 percent of its participants meet these guidelines and uses the JTPA "window" for other students.

[2] Academy records indicate that 73 percent of Academy students test below the national 25th percentile in either reading comprehension or math skills on the California Achievement Test; 35 percent tested below the 25th percentile in both.

Considering citywide approaches in the study, both the Atlanta and Boston school systems had suffered substantial deterioration in student and teacher morale, declining academic achievement and a loss of community support before the programs began. In addition, white flight associated with desegregation and the existence of a strong private school system had resulted in economically disadvantaged school populations in both cities.

The number of students potentially affected is, of course, different for student-focused programs than for those involving entire schools or systems. However, the distinction should not be overemphasized. While a schoolwide program theoretically provides benefits to five or six times as many youth as a student-directed program, all students may not receive the same benefits or opportunities. In some systemwide and schoolwide programs, only students judged to be most able are recommended to employers for part-time and summer jobs. In others, only those recommended by guidance counselors or teachers are placed in internships, special classes or other limited components of the program.

Student-oriented programs, such as TOPS, New Horizons, Philadelphia Academies, and the Off-Campus Work/Study Program, offer services and support to all students accepted into the program in a uniform manner. Students receive similar curricula, specialized attention, job counseling and placement. Even in these programs, however, students who are judged not ready for placement may be denied the opportunity for part-time employment until their skills, attitudes or attendance habits improve. These programs, in fact, use the "carrot" of job placement to induce students to maintain academic performance. Although only a small number of each program's students are affected by these employment requirements, program managers cite the need to maintain standards to keep business support. Sending unqualified students to take jobs with business supporters diminishes the credibility of a program and jeopardizes community support.

Larger, more global initiatives serve more students in a less uniform manner. Although the adopt-a-school programs in the study are intended to support general school improvement activities that benefit all students, they also include work and special activity components that are very restrictive. For example, the Tenneco partnership, which provides more than $100,000 to support school activities each year, also selects and places about 100 students in summer jobs with Houston-area nonprofit agencies. Similarly, Primerica sponsors a series of relatively small programs for limited numbers of students each year, while maintaining its commitment to overall school support.

The programs in our study all serve a population that can reasonably be characterized as at risk. Some choose to emphasize economic disadvantage, while others take aim at academic deficiencies. It is apparent, however, that few programs are designed to serve students at highest risk, i.e., those exhibiting high absenteeism or exceptionally low academic performance. Almost all programs have minimum criteria for performance and motivation that screen out such youth and many target only juniors and seniors, a point by which many high-risk youth have already dropped out.

CONCLUSION

The approaches taken by school/business collaborations can be divided into two general types: programs that target a well-defined set of youth and direct their activities toward meeting educational and employment needs, and programs that aim to improve overall schools or school systems as a means of improving the opportunities of all youth, including those who are educationally and economically disadvantaged. In general, the programs are representative of strategies identified by the Committee for Economic Development (1985:87) that seek to support the educational system and foster incremental changes through funding and program involvement. The strategies are rarely designed to bring about structural reform in the delivery of education.

We expected several features to be found in most programs, primarily work-readiness training, remediation and basic skills training and school improvement. In reality, we found that most programs focus on work-readiness by offering jobs and work maturity classes as principal activities, but rarely offer vocational training. We also discovered that remediation and/or basic skills training components are rare. As expected, school improvement activities, such as direct contributions and efforts to build school pride, raise student morale and reduce dropout rates, were frequently observed in school- or system-focused programs; however, they are not uniformly or consistently supported across programs.

The programs in the study were selected because they seek to serve an at-risk population and our analysis confirms that the programs serve such youth. However, there are important caveats. Most student-focused programs have recruitment or selection criteria that exclude those most at risk--dropouts, those with chronic absenteeism, and those whose academic performance falls below minimum standards. Nevertheless, student-focused programs do serve students whose academic performance or economic background make them likely candidates to leave school before graduation or to graduate without the skills needed to be a productive adult. Most participants, in fact, are students who normally would receive little or no special attention during their academic careers.

School- or system-focused programs take a broader approach to reaching at-risk youth. However, our analysis shows that most of these programs also employ selection criteria that exclude high-risk students from participation in the most intensive or developed components of the programs, such as employment and internships. Our findings show that these programs target schools or districts where a majority of students are at risk, but that for a variety of reasons, the neediest students receive few direct services.

IV. HOW THEY DO IT

School/business partnerships usually develop outside the formal decision-making and operational structures of both the schools and businesses. In most of the collaborative efforts included in this study, an ad hoc committee composed of representatives from schools, businesses and, frequently, other community organizations was responsible for initiation.

In the collaborative efforts in Birmingham, Richmond, Houston, New York, Philadelphia and Boston, individual businesspeople or groups representing the business community were the primary movers in launching the planning effort. Private Industry Councils in Richmond and Boston; the "Vault," Boston's committee of leading corporation CEOs; the Birmingham Area Alliance of Business; and the Philadelphia Urban Coalition were organizations of business and community leaders that played significant roles in forming their cities' partnerships. During the early stages of planning partnerships, businesses frequently were represented by CEOs or other upper-level managers. In these communities, school representatives, while privy to and supportive of the efforts, rarely took the lead in developing the programs.

In St. Louis, Atlanta and the state of California, school leaders adopted a much more visible role in advocating the creation of the programs. For example, in both Atlanta and St. Louis, the school district superintendent made strong appeals to the local community to support public education through participation in new educational initiatives. In California, educators concerned about deterioration in the quality of secondary vocational training called for a regional approach that involved both public and private support.

Funds made available by several foundations also assisted in the formation of collaborations. For example, The Edna McConnell Clark Foundation was instrumental in providing impetus for New Horizons and TOPS as part of its Partnership Projects. The same foundation also supplied funds for the initial Jobs Collaborative component of the Boston Compact. In St. Louis, the Danforth Foundation supported creation of the Off-Campus Work/Study Program.

MANAGEMENT OF COLLABORATIONS

As discussed in Chapter II, schools and business have historically maintained a strict delineation of responsibilities in their interactions. Since the programs in our study were neither exclusively school nor business programs, some arrangement for managing and bridging the two worlds had to be devised.

In some communities, schools and businesses already had a history of working together on other projects, thereby lessening the territorial barriers that might have prevented effective program operation. Boston is a striking example of a city where mutual trust was built through a series of collaborative efforts between schools and businesses over a five- to ten-year period. In other cities, such as Atlanta, Birmingham, Richmond and Philadelphia, the presence and sponsorship of a group that worked as an organizing body before assuming responsibility for management of the process helped define the responsibilities of both sides. In these cities, trust and a sense of what each participant could be expected to contribute had developed over time. In other sites, collaboration was a more recent phenomenon, and was often triggered by communitywide problems.

Management of efforts within the educational system was also difficult, since that system is characterized by a series of loose linkages. Each component has a degree of autonomy that allows it to limit the degree of influence and control other parts of the system can exercise (Louis and Rosenblum, 1981). Also, schools and school systems are largely closed to outsiders. Entrance usually must be made at the lowest rung and promotions are made from within, with advancement tightly controlled by certification requirements.

Businesses and schools will most effectively collaborate when they are sensitive to each others' interests and limitations. By its participation, business acknowledges the schools' problems and offers general support for solving them, but few businesses are prepared to develop and manage the programs designed to seek solutions. As programs go beyond the planning stage, business' role is primarily to respond to requests from the schools. Contributions can take the form of time and counsel as well as provision of funds or jobs; however, businesspeople are not usually eager to assume responsibility for the joint efforts.

Nor do business leaders become involved in planning collaborative efforts with the idea of achieving specific goals, such as specific number of youth served or specific changes in achievement test scores, attendance rates or dropout rates. In most programs, goals are set by the school or the intermediary organization operating the program. Although businesspeople may want to see measurable improvement in test scores or dropout rates, those who agree to participate in a joint school/business effort generally do not make their participation conditional on achievement of measurable changes or specific benefits to their company. Even in the Boston Compact, a collaboration intended to hold both partners to achievement of measurable and highly public goals, business leaders did not withdraw support when the goals were not immediately met. While business motivation for contributing money, jobs and personnel to joint efforts stems from their desire to improve the quality of education, most businesses do not approach such efforts with anticipation of profits, quantifiable goals and clear milestones by which to measure progress, as they would business deals.

The nature of the programs, which are wholly owned by neither the school system nor the business community, makes them highly dependent on the quality and strength of the body that oversees them. Taking responsibility for implementing a concept and operating a program requires a full-time commitment of time and staff.

The most frequently observed solution to managing the collaborations was the creation of an intermediary organization--an organization governed jointly by the business and education communities whose principal tasks are to operate the program on a day-to-day basis, solicit resources from supporters and sustain interest and enthusiasm in the program's mission within the community. Although the intermediary organizations are newly created to take responsibility for the collaborative effort, they are staffed by people with a background in such efforts. In Richmond, Birmingham, Boston and Atlanta, for example, those who helped launch the initiative play an important role in the intermediary. The intermediary organization draws on resources of other organizations, particularly Private Industry Councils, but primary responsibility rests with permanent staff.

There are differences among intermediaries in the extent to which they solicit continuing assistance in program operation from participating schools and businesses. The director of the Birmingham Area Alliance of Business (BAAB), the intermediary that operates the TOPS program, has consulted business representatives on the board for financial advice and management assistance. The Atlanta Partnership functions as an umbrella intermediary, sheltering Adopt-A-Student, one of the few programs that is principally managed by businesspeople. The Partnership's most visible program, Adopt A School, is run by a school district employee with assistance from a board composed of businesspeople.

Although there is a small full-time Compact staff in Boston, responsibility for the jobs component is shared by staff at the Private Industry Council. Supervision of individual partnerships is usually the domain of the development officers in each school, who usually have counterparts within the business partner's organization. The directors of Philadelphia's Academies work with lead teachers at each Academy as well as with business advisory groups, who play an active role in fundraising, job recruitment and curriculum review.

The study clearly shows that a number of diverse institutional arrangements have been developed to administer programs. Many programs are run by an intermediary organization or office; some are located within the school district and supervised by school personnel. Several programs are run directly by business volunteers, while still others are operated by committees composed of business and school representatives. In several communities, separate organizations have been created to administer programs.

We observed few differences across programs that appeared to result from the type of organization that managed the collaboration. However, we were struck by the degree of commitment and the time required of a cadre of staff or volunteers to sustain the program.

Staffing

There has been remarkable stability among staff responsible for overseeing school/business initiatives. Several program directors have managed collaborations since their founding; their names are often as well-known within the community as the programs themselves. Most program directors emerged from backgrounds in education, but almost all have learned to work well with the business community.

The efforts of permanent staff are complemented by those of businesspeople whose employers allow them to dedicate substantial amounts of time to the program. In some partnerships between schools and businesses, an individual businessperson has primary responsibility for working with the school and managing the company's participation. In other instances, businesspeople participate by serving on program advisory teams, recruiting employees to serve as tutors or mentors, arranging part-time jobs for students and serving as ombudsmen for program-related problems. Many of the personnel devoted to partnership activities are recruited from companies' public affairs offices. Several report spending 80 to 90 percent of their time engaged in activities on behalf of partnerships, while others do partnership work in addition to their regular tasks, with little official released time and little official recognition within the company.

While the loan of business personnel to education initiatives may be viewed as evidence of a real collaboration, it raises questions of allegiance and permanence. By their nature, employee "loans" are temporary, and unforeseen pressures at the corporate level, such as changes in market conditions or administration, can jeopardize the agreements that were reached in negotiating the loaned employee's assignment. Also, as programs expand, the need for additional "free" staff may be beyond the ability of the company or school district to accommodate. During the observation period, we encountered few problems related to program dependence on staff arrangements; however, the degree of individual staff members' commitment to programs may become problematic as programs become more dependent on personnel than content. Also potentially troublesome is that many programs depend heavily on the backing of a single corporate executive. For example, the relationship between Martin Luther King, Jr. High School and Primerica evolved from the strong commitment of the company's chief executive officer. After his retirement, however, the status of the partnership within the corporation was unclear and enthusiasm for the project diminished.

Sources of Funding

Programs obtain funding and receive support from several sources, including grants from businesses and foundations, school budgets, state revenues, federal dollars through the Job Training Partnership Act and in-kind contributions of staff and other resources. In most school/business partnerships, however, the lion's share of funding is obtained from a single source. In the following collaborations in our study, a primary source could be identified:

- The Off-Campus Work/Study Program and Regional Occupational Centers and Programs are almost exclusively supported by public education funds. Businesses contribute classroom space and allow students access to equipment, but their principal contribution is in the form of student jobs.

- Both adopt-a-school initiatives (as well as the adopt-a-school components in Boston and Atlanta) are almost entirely financed by the business partner. Overall, Tenneco's contribution, including the cost of staff time, increases the school's total per-pupil expenditure by 4 percent. Tenneco provides a staff member from its Office of Community Affairs to be a full-time manager the program. Tenneco also funds the administrative costs of the Communities in Schools program. In Primerica/Martin Luther King, Jr. High School Partnership, funds come from Primerica Corporation and its foundation. A very limited amount of public education funding is used to support these efforts.

- In the New Horizons and TOPS Partnership projects, a large majority of the funds come from local Private Industry Council JTPA disbursements. Individual corporations also contribute funds to these programs, either in lieu of offering student jobs or as general support. Direct school district support for both programs is limited, though in Richmond, the district supplements teacher salaries for performing additional duties during the regular school year.

In contrast, the following programs receive significant financial support from several sources:

- The Atlanta Partnership of Business and Education derives most of its youth-directed program support from the Atlanta public school district, which pays several professional and support staff salaries. However, the business community contributes directly to the Partnership, supporting the director's salary and administrative costs. The Partnership is also the designated recipient of The Rockefeller Foundation's Distinguished Scholars/Humanities Program and manages this teacher training initiative as part of its overall activities. The large Adopt A School program under the Partnership umbrella often involves a considerable transfer of funds between the business partner and the school, which is not reflected in the overall Partnership budget. The Adopt-A-Student program, while under the umbrella of the Atlanta Partnership, is administered by the business community in cooperation with the school district.

- Funding for the Boston Compact is obtained from a somewhat different mix of sources. The school district pays for the development officer position in the high schools. The district also has a contract with the Boston Private Industry Council to provide most high schools with career specialists; the district and the Council share salary costs. The Private Industry Council oversees the Jobs Collaborative component of the program and uses JTPA funds to support eligible students in summer and part-time positions. Business supporters contribute to the program through student employee wages, through partnerships with individual schools and, most recently, through a multimillion dollar scholarship fund for graduates. Finally, under the mandate of the Compact, Boston schools receive funds from various national and local foundations to support new dropout prevention programs and other initiatives.

- The Philadelphia Academies are also supported by a joint funding approach. The school district contributes funds in excess of its normal allocation per pupil, while the business community contributes substantial administrative and material support to the Philadelphia High School Academies Association and the four Academy organizations. In addition, most of the 10 Academies have an individual corporate benefactor contributing to the implementation of the Academy model in that site. Business financial support is used to augment salaries of teachers who perform extra duties, such as preparation of special program components, curriculum revision, student tutoring and attendance at summer training sessions. Business funds are also used to sponsor awards and scholarships for Academy students. Additional business support is evidenced by a loaned executive program and by students securing wages for summer and after-school work.

PROGRAM STABILITY

Program stability depends on the continuity and strength of staffing and on sustained funding. Most programs are still best described as "initiatives"; they continue at the discretion of one or more existing organizations (primarily schools, corporations and foundations) and often depend on discretionary funds to operate. These are not factors that create stability.

Few programs are well-insulated from budgetary dissolution. At highest risk appear to be adopt-a-school programs. For example, recent downturns in the oil industry have curbed Tenneco support of a wide array of programs and nonprofit groups. Although this has not meant a trimming of contributions to its adopted school, Jefferson Davis High, the effect on the partnership has been reflected in a decrease in the number of volunteers as tutors and the number of hours they spend in partnership activities. In both Boston and Atlanta, some adopt-a-school pairings have dissolved when corporations withdrew financial support as a result of a mismatch between school needs and business resources.

For the most part, however, the financial support of business for the initiatives in our study has been sustained since their inception. The two adopt-a-school supporters have donated more than $100,000 in each of three or four successive years. In Boston, major corporations have maintained their support of individual schools and have created multimillion dollar endowments for scholarships and other educational support. In Philadelphia, some individual corporations have sponsored Academy sites for more than 10 years, contributing up to $50,000 per year toward general support of the program.

Businesses have also sustained their commitment by providing paid employment to youth. These efforts have generally been maintained at least at original levels, and many businesses have expanded job programs to include substantially more youth each year. Across the partnerships, businesses differed in their use of JTPA subsidies and Targeted Jobs Tax Credits in hiring youth from the programs; when these supports were easily available, some businesses used both to subsidize the wages of program youth. However, many businesses hired youth without relying on either support.

Programs that depend on JTPA funds appear to have achieved a fair degree of stability, though they often cite JTPA placement requirements in explaining why a more disadvantaged population is not recruited. Both New Horizons and TOPS recruit moderately achieving students, i.e., those with a "C" average and good attendance. This ensures that employers will be willing to hire participants, giving the programs high placement rates. To the extent that they continue to maintain such rates, the programs seem secure.

Larger programs funded by the school district or the state appear to be the most financially secure. The state government supplies nearly all funds needed for ROC/P, and a substantial share for the cost burden for the programs in Atlanta, Philadelphia and Boston is included in their respective school districts' budgets. These programs do not require a separate appropriation each year.

State governments and school districts have been reliable allies for programs in our study. We found several examples of the strength of this support. Recently, the Philadelphia school district called for expansion of the Academies program, recognizing that the district would have to assume much of the increased cost. In a recent period of fiscal austerity in Boston, the new superintendent adopted a "hands-off" position when it came to the question of reducing the district's contract with the Boston Private Industry Council for the service of job developers in the high schools. California's support for the Regional Occupational Centers and Programs grew substantially in recent years and eventually reached $200 million, though this leveled off somewhat when California faced revenue shortfalls in its most recent fiscal year.

CONCLUSION

Implementing and managing school/business collaborations requires both innovation and persistence. When organizations from different sectors of society join to address a common problem, new rules and methods of interacting must be developed. In the programs studied, intermediaries play a crucial role in managing links between schools and businesses. However, their existence neither eliminates all problems nor prevents the emergence of threats to the collaboration. Collaborations are often highly dependent on only one or two corporations for financial and material support. In addition, most collaborations continue to operate through the considerable personal initiative of key staff members within the organization or sympathetic personnel in the business or the school district. The departure of any of these pivotal individuals may portend serious problems for an initiative.

Few collaborative programs have become institutionalized. (The exceptions in our study were the ROC/P and the Philadelphia Academies.) While this has enabled collaborations to develop with a high degree of flexibility and freedom from organizational constraints, it may pose problems in the future.

V. PROGRAM EFFECTS

School/business collaborations can be expected to produce effects on three groups--the students participating in the programs, the schools or school district involved, and the participating businesses. This chapter identifies the effects that are documented by data reported by the programs, field observations and interviews, and quantitative analyses of school data in Boston and survey data in Philadelphia.

EFFECTS ON STUDENTS

Most programs aim to help students make the transition from school to work. Even programs that are directed at general school or system improvements have major program components intended to increase students' employability and job maturity. It is these programs and components that appear to produce the greatest effects on students--effects that are evidenced by in-program and postprogram employment rates. The collaboration components that seek to enhance the schools' educational and support services through refocused curricula, tutoring and other activities appear to have a far less demonstrable effect on students, at least in the short term.

The following sections discuss the collaborations' effects on students in the areas of employment opportunity, degree of individualized attention and access to postprogram education. Educational effects, such as improved attendance and achievement and reduced dropout rates, are included in the discussion of school effects because little is known about the impacts of programs at the individual student level. Data on changes in educational indicators are only available as school and district aggregate statistics.

In-Program Employment

A major benefit of participation in school/business programs is often the experience of holding a part-time or summer job. As reported in the individual profiles, program records indicate high rates of part-time placements. Programs in St. Louis, Richmond, Birmingham, Philadelphia and Houston report that over 90 percent of participants in their jobs components are placed in after-school or summer employment. The Boston program placed more than 2,500 students in summer jobs during 1986 and reported helping several hundred juniors and seniors find part-time work during the school year. California's Regional Occupational Centers and Programs place thousands of students in part-time co-op education settings during the school year and summer. While some students in these programs would have found jobs anyway, these programs increase the chances of participating youth to be employed while in school.

Furthermore, students with clerical positions often work on equipment of quality that far exceeds that available in schools, such as word processing, duplicating and communications equipment. In several initiatives, including the Regional Occupational Centers and Programs and the Boston Compact, program supporters allow instructors or teachers to train students on company materials and machines.

In addition to this on-the-job training the programs provide other benefits. First, students learn about office and corporate culture, with its demand for appropriate dress and behavior, forms of address and work demeanor. This exposure reinforces job maturity instruction. In fact, the link between instruction and the reality of the office setting is regularly emphasized as a key component of the programs. Second, students can use part-time experience as a selling point when applying for a new job. Third, the close links that are forged between employers and programs allow programs to be informed of students' skill, motivation or attitude problems and take steps to correct them before they cost the students their jobs. Fourth, a few students in each program are able to transform a part-time or temporary summer job into a full-time job after graduation. Finally, part-time jobs can give students increased access to major employers. The supporters of collaborations are generally among the "blue-chip" companies in the local economy; they often include the cities' largest banks, insurance and financial services companies, major retailers and the main offices of major international corporations. Despite these organizations' need for entry-level workers, few of the program participants, who are often recruited from the least academically able segments of their schools, would have the skills, knowledge or confidence to seek employment with such organizations. Furthermore, the organizations generally have few mechanisms for recruiting such students. Thus, the programs provide an essential bridge between students and employers.

Programs are very conscious of the potential negative impact of part-time work on students' academic perforamnce. Most have made agreements with employers to prevent students from working if they skip classes and to release student workers whose grades began to decline.

Postprogram Experiences

Success in postprogram employment was difficult to determine, as limited data were available for only five of the nine programs studied. Data on four of the programs were culled from surveys conducted by the collaborations themselves, which did not provide information about students with whom comparisons might have been made. Data on the fifth were collected in a P/PV survey of Philadelphia Academy graduates, which utilized a comparison group method.

Surveys of recent graduates conducted by the St. Louis, Richmond, Birmingham and Boston initiatives indicate that a high percentage are entering either the labor market or postsecondary training. The percentage of surveyed graduates who were not working or in school, including those who have dropped out of the labor force, appears to be lower than the unemployment rate for adolescents in the community. For example, among graduates of the Off-Campus Work/Study Program in St. Louis, 75 percent were employed and an additional 15 to 20 percent were continuing their studies. Among 1985 graduates of TOPS in Birmingham, almost two-thirds were in school, a quarter were employed, and only 9.5 percent reported being neither in school nor employed. Among Richmond's 1985 New Horizons graduates, only 6 percent were not working or in school a year after graduation. Similarly, a survey of 1985 Boston high school graduates conducted by the Boston Private Industry Council found that only 7 percent were unemployed or not in the labor force six months after graduation.

In an attempt to gauge the differential between postprogram experiences of participants and those of other youth, P/PV surveyed graduates from the Philadelphia Academies and two comparison groups of graduates from the same high schools in which Academies are located. One comparison group comprised students who had taken vocational courses similar to those offered by the Business Academy. The second comparison group was a random sample of remaining graduates. The Philadelphia Business Academy students were drawn from a population at greater risk academically than were the two comparison groups. Despite this difference, we found that while Academy graduates were no more likely to be idle than graduates in the two comparison groups, the Academy graduates were significantly more likely to be working than attending school.

Whether students can consistently transform in-program placements in major companies into permanent positions is uncertain. However, more than one-half of 1985 Philadelphia Business Academy graduates worked for an Academy supporter after graduation. In contrast, only a quarter of other Philadelphia public school graduates worked for these firms after graduation. This suggests that participation in such programs increases both access and employment opportunities for students.

The five programs in the study for which data are available appear to succeed in preparing participants for postsecondary endeavors. Graduates of these programs had relatively low rates of unemployment six to 18 months after graduation and, despite the programs' focus on employment rather than education, substantial percentages of graduates reported being enrolled in postsecondary education. Graduates from the other four collaborations may have had similar postgraduation outcomes, but we do not have quantitative evidence to demonstrate this.

Types of Employment

Most students enrolled in the employability development programs are female and most businesses involved in these collaborations are in industries whose principal activity requires substantial clerical assistance, such as banking and insurance. Therefore, it is not surprising that our study shows that in-program work experience was largely confined to entry-level clerical jobs in medium-sized or large offices. Even the few manufacturing companies involved in partnerships offered jobs that were predominantly clerical. Activities generally included light to moderate typing, copying and filing, limited telephone receptionist duties and mail distribution. As a rule, students were directly supervised by a member of the support staff or a middle-level manager. Most were paid at federal minimum wage rates, but some received the wage rate associated with their position in the department.

Jobs that were not clerical were few. In several programs, students in automotive vocational programs were placed in area service stations or car dealerships. Several retail store supporters employed students as cashiers, stock boys and sales personnel.

Available information on the nature of participants' employment after graduation shows that many students went on to obtain clerical positions. Without the program, many would likely be working in irregular, high-turnover positions. It is apparent, however, that participation in programs with heavy emphasis on clerical training did not automatically lead students to accept clerical jobs after graduation. For example, while 55 percent of employed Philadelphia Business Academy students accepted clerical positions in the first 18 months after graduation, the rest accepted other types of jobs during the same period.

Increased Personal Attention

Although little information on actual program impact is available, it is clear that many programs increase the amount of individual attention students receive. Research (Mahood, 1981; New York City Board of Education, 1984; Bowen and Lipkowitz, 1985) indicates that attention is often key to academic success and staying in school. Most students in these programs reportedly receive little attention before participation.

Three programs in the study--TOPS, New Horizons and the Off-Campus Work/Study Program--serve a limited number of students intensively. Participants are given specialized training and counseling to prepare them for the world of work. The

Philadelphia Academies also reduce class size to increase student/teacher contact, but forge an even closer link between students and teachers by establishing teacher teams that meet regularly to discuss the achievement and behavioral problems of individual students. By design, students have the same teachers for all four years they are in the program; thus, teachers become familiar with students' individual strengths and weaknesses and can devise a long-term strategy for each.

In addition to small class size, many programs are designed to facilitate increased personal attention to students through the use of volunteer tutors and mentors and the pairing of student workers with supportive supervisors. These relationships usually develop informally when volunteers come in contact with students as tutors or work supervisors. In most sites, students reported developing strong ties with their coworkers or supervisors and said they appreciated the opportunity to work in conjunction with adults and develop friendships based on shared work experience. Students also indicated that they believed coworkers and supervisors were looking out for them and had their best interests in mind.

More formal mentoring programs undertaken in Atlanta and Houston met with mixed results. Strong relationships developed among a limited set of students and volunteers, but more frequently, relationships were stilted and never progressed beyond the minimum requirements of the mentoring component of the program.

Access to Educational Opportunities

In addition to providing in-program educational or training opportunities, several programs have components designed to enable graduates to advance to postsecondary training. A surprisingly large number of program graduates do so. Programs promote this end by offering scholarships to some participants and by emphasizing to all the need for further training to get ahead in the labor force. Both Tenneco and Primerica award several four-year scholarships to graduating seniors and a recent extension of the Boston Compact created a multimillion dollar endowment to support postsecondary education scholarships for Boston high school graduates. In its first two years, this endowment awarded 250 scholarships that bridged the gap between the funds available to worthy students from other sources and the amount needed to attend college. The Philadelphia Health Academy developed a four-year program that prepares students to enter two- and four-year colleges for additional training. All but two of the 17 graduates from the Health Academy's first class enrolled in college.

Several programs also report that some graduates took advantage of employee benefits at corporations where they work as a result of program participation. Many employers involved in collaborations have tuition support programs that encourage workers to further their education.

EFFECTS ON SCHOOLS AND DISTRICTS

Like effects on students, effects on schools and school districts or on the educational process itself result primarily from programs specifically intended to produce such effects. While employment-focused programs increased students' employment-related outcomes, system-focused programs influenced school morale, services and activities, and, in some cases, improved aggregate achievement, attendance and retention. Only teacher morale improved as a result of both types of programs.

School Morale

School/business collaborations, especially the adopt-a-school models, produced positive effects on morale. The most noticeable improvements in school atmosphere and morale were found in the adopt-a-school programs in Houston and New York, which were specifically designed to produce schoolwide effects. Both initiatives incorporated a variety of morale-boosting components, including physical improvements to the school, contests designed to improve attendance and achievement, distribution of shirts and other items imprinted with school colors, and sponsorship of major events involving the entire school population. Primerica held its stockholders' meeting at Martin Luther King, Jr. High School in New York and Tenneco sponsored a communitywide party commemorating the 60th anniversary of Jefferson Davis High School in Houston. These unique events were intended to animate the school population and celebrate the strength of the partnership. In their intent and effect, this type of event quite clearly distinguishes school-directed partnerships from those directed at improving individual student outcomes through job placement.

Three of the student-focused programs in our study are conducted separately from regular school--classes in St. Louis are held at sponsoring companies' facilities, and Birmingham and Richmond classes are held after school or on weekends. Therefore, schoolwide morale is not dramatically affected. The Philadelphia Academies, governed by the remaining student-focused program, are physically located in host high schools but are widely perceived as separate programs. However, Academy students participate in schoolwide events and such activities as sports, student government and clubs. Administrators in Philadelphia schools reported that Academy students are often catalysts for increased school morale.

Teacher Morale

Teachers in virtually every program studied said that their participation eliminated much of the isolation they experienced in the regular school system. Collaborations provide additional resources and opportunities for teachers to meet professionals outside the schools, participate in curriculum development and develop professional relationships with other teachers. They are able to teach smaller classes, often with students specifically recruited for the program, which allows them to feel more like mentors and role models for students. In addition, teacher satisfaction is increased by professional recognition, including monetary compensation. Clearly, the programs address many of the most frequently cited limitations of a teacher's role, including lack of career development, lack of opportunity to meet and work with other professionals, and lack of real input in development of new programs and curricula.

School Services

A marked increase in services was evident in programs intended to bring about institutional changes. In the Tenneco/Jefferson Davis partnership, for example, the corporation almost single-handedly returned after-school activities to Davis, providing support for the football and baseball teams and underwriting the school newspaper. Tenneco also offered tutoring services and a jobs program, and sponsored literary and art contests. Similarly, Primerica sponsored a wide range of activities at Martin Luther King Jr. High School, such as a video newspaper, a new after-school club, and legal affairs and financial education programs. In addition to the benefits of having individual activities of this kind available, Martin Luther King, Jr. High School staff said they produced a cumulative effect. They reported that the program had been a catalyst in moving the school from "the brink of disaster."

System-directed collaborations have resulted in improvements to the physical plant and acquisition of or access to new equipment and supplies. Improvements to the physical plant were most frequently observed in adopt-a-school settings; both Tenneco and Primerica made substantial donations of money, materials and personnel to their partner schools for refurbishment of auditoriums, and repainting and recarpeting of the school buildings. Similar physical improvements were observed in the adopt-a-school partnerships in Atlanta and Boston.

Donations of equipment and material for instruction were also frequent trademarks of adopt-a-school programs. Among items donated were office machines, automotive mechanics' training equipment and computer hardware. In addition, California's Regional Occupational Centers and Programs allowed host schools to use ROC/P equipment for regular vocational classes when not required for the program.

Attendance, Retention and Achievement

School/business partnerships have a mixed impact on attendance and graduation rates and academic achievement measures. Student-focused programs that emphasize employability showed no significant impact on such measures at the school or system level, but may affect performance of those students within the programs. Richmond's New Horizons, St. Louis' Off-Campus Work/Study and Birmingham's TOPS, all independent student-directed initiatives, report high program completion rates and high levels of attendance, but little information is available on academic performance. It is important to remember that none of the three initiatives emphasizes improvement of academic measures as a central goal, instead choosing to focus on providing individual students with vocational training and counseling.

In contrast, the Philadelphia Academies seek to improve both the employability and academic performance of students and have specific components designed to do so. The Academies report average attendance rates of over 90 percent in a school system that averages 10 to 20 percentage points lower. The Academy model was originally conceived as a dropout prevention program and recruits students with significant academic deficiencies. The Academies appear to have made progress in combatting the problem. Almost four of every five students enrolled in the Academy in 1981 successfully completed high school, a rate substantially higher than the districtwide average of 67 percent. No conclusive evidence exists concerning the ability of the Academies to improve academic performance itself. Still, since Academy students are recruited from among students whose achievement test scores place them in the lowest quartile, the fact that the large majority graduate, about half of whom enter postsecondary training, suggests that the program has a positive academic impact.

Systemic improvement programs have met with only moderate success in increasing attendance, decreasing dropout rates and improving academic achievement. Of the three measures, programs have been most successful in improving average daily attendance. At Houston's Jefferson Davis High School, attendance has improved to 94.5 percent in the five years since the partnership began, an increase of more than 11 percentage points. On the other hand, attendance at New York's Martin Luther King, Jr. High School edged up only 1 or 2 percent in the first two years of that collaboration. Finally, Boston recorded improvements of more than six percentage points in its high schools during the first three years of the Compact. Some of the schools with the worst attendance rates in the city saw increases of more than 14 points during that period.

These programs have had greater difficulty reducing dropout rates. In Boston, the rate has remained stubbornly high at 43 percent, prompting the Compact to devise new communitywide responses. At Martin Luther King, Jr. High School, the dropout rate has not decreased significantly from the 60 percent rate that existed when the partnership began.

On indicators of academic achievement, the little reliable data available show some positive program effects. Jefferson Davis High School, which rated among the two or three schools with the poorest performing students in Houston in 1981, moved to the 18th position of 27 schools academically by 1986. At Martin Luther King, Jr. High School, reading grades have improved substantially since the start of the partnership. However, the proportion of students passing state-level competency examinations required for graduation has fluctuated during the same period; almost a quarter of students failed to meet graduation competencies in 1984.

In Boston, substantial districtwide improvements in reading comprehension and math skills were recorded during the initial years of the Compact. When the Compact began, median student test scores were as much as 20 points below national norms. In the ensuing years, during which more emphasis was placed on academic testing, Boston median test scores in both reading and mathematics improved an average of 10 to 15 points, placing them only five points below previous national norms. Renorming of tests in 1986 again placed Boston schools substantially below national averages, but this does not diminish the progress demonstrated in earlier years.

It is difficult to ascribe substantial changes in academic performance indicators to most partnerships. In many programs, no changes were observed at all. Even in instances where a change was apparent, it is impossible to credit the partnership directly. However, the additional resources brought to schools and the increased attention focused on schools due to collaborative initiatives are likely to have had an indirect influence in improving educational results.

EFFECTS ON BUSINESS

Both schools and businesses embark on collaborative efforts with the goal of improving opportunities for at-risk youth. Thus, direct benefits would be expected to weigh more heavily for schools and youth than for business. Indeed, businesspeople generally do not enter partnerships with schools with high expectations; unlike other activities that draw on corporate resources on a regular basis, agreements with schools are generally treated as contributions. Businesses may expect their contributions to generate some type of impact, but do not make them contingent on achievement of specific ends. Even in the Boston Compact, a program in which specific academic goals were set, business did not withdraw support when goals were not fully realized. Businesses themselves cultivate the impression that they perceive partnerships as contributions by couching their professed reasons for involvement in terms of civic responsibility and good corporate citizenship. Corporate leaders involved in programs directed at serving large numbers of youth or improving entire school systems also point to their future need for the schools to provide a literate and trained labor pool so they can continue to operate efficiently in an urban setting.

In effect, businesses are the givers in partnerships, while schools and youth are the receivers. It is not surprising, therefore, that a review of the programs yields scant evidence of direct or immediate benefits for business. Consider the following points:

- Student workers are paid at lower rates than regular employees, but training and supervision costs probably offset any wage savings.
- Some student workers are eventually hired as permanent employees, but the informal nature of the process and the small number of students involved make the program a minor component of the recruitment and screening process for potential employees. Many firms that participate in a collaboration involving jobs have hired a number of graduates over the years, but they rarely keep count and do not view obtaining such hires as a measure of the program's effectiveness.
- Business is involved in vocational curriculum development in several programs, but students trained according to industry specifications do not necessarily join a company sponsoring the partnership. Such training will always be sufficiently generic to prepare students for employment elsewhere; without a clear mechanism for recruiting students as they graduate, sponsors will find that many students will find work elsewhere. We saw little evidence that such mechanisms exist.

Within a sponsoring business, supervisors often develop important relationships with working students. Companywide, the students' visibility is usually low, despite articles that often appear in corporate newsletters. Other employees in the organization may be unaware of their presence and the executive who approved their hiring often has no further contact with the program or the students. Even in programs like St. Louis' Off-Campus Work/Study Program and the Regional Occupational Centers and Programs in California, where students attend classes at the worksite, students seem to receive little attention.

Most school/business collaborations have attempted to publicize the essential role played by business. Adopt-a-school efforts, in particular, receive considerable press coverage in local news media. Other initiatives, most notably the Boston Compact, have also received substantial press coverage. Prominently featured in every press release, caption or article are the corporate affiliations of individuals involved in the school/business activity. Although no business asserts that good public relations is the sole rationale for involvement, the high community profile of many companies involved in these initiatives and their reliance on the goodwill of the community's citizens certainly contribute to their willingness to participate.

Thus, our study makes it clear that businesses receive few direct or immediate benefits from participation in these partnerships, nor do they expect to. However, we found that businesses do anticipate long-term benefits, such as improved public relations, a better-trained work force, and an improved social and economic environment in which to conduct business.

CONCLUSION

An assessment of the effects of school/business collaborations must take into account both the perspective and expectations of the individuals who are directly affected. From the perspective of individual youth who participate in these programs, the partnerships seem to provide some very important, immediate benefits. Most programs allow youth the opportunity to gain work experience while in school and assist them in job placement after graduation. Student-focused programs are especially geared to promoting job maturity skills and giving youth direct employment experience. A key employment advantage of the programs studied is that they give youth access to corporate employers who they would not normally approach.

Also, school/business partnerships frequently give youth greater personal attention than they would receive in a regular high school setting. Personal attention made possible by lower student/faculty ratios, mentoring and counseling programs, and on-the-job supervision can strengthen the essential link between academic achievement and future economic and employment success in students' minds. Finally, the collaborations studied have often expanded beyond simply providing entry-level jobs to include inducements for youth to continue in postsecondary education, such as college counseling, grants and scholarship programs.

A second perspective that must be adopted in assessing school/business partnerships is one that considers the long-term impacts. Sustainable changes that improve the delivery of education are more difficult to discern and are frequently more difficult to ascribe directly to school/business partnerships.

Although most school- and system-focused programs are designed to support this type of improvement, evidence of their success is limited. In the programs studied, we identified three areas in which positive changes were evident: school morale, teacher morale and increased school services. Although these are not direct indicators of academic achievement, they are often identified as preconditions for improvement.

Findings on the programs' direct impact on academic performance measures were mixed. For a variety of reasons, student-focused programs demonstrated little direct impact on academic performance. In the schools directly involved in school- or system-focused programs, attendance rates increased; academic achievement, as measured by standardized test results, showed only modest improvements; and dropout rates stubbornly resisted efforts at reduction. Despite these mildly disappointing results, a potentially strong benefit to schools from these initiatives is the formation of a well-informed, experienced constituency of businesspeople to effectively promote public education in their communities.

Businesses usually enter into partnerships with few expectations of realizing immediate or direct benefits from participation. In fact, the advantages of participation are often difficult to discern. While some companies bask in the glow of positive publicity and others use the partnership initiative as a mechanism for identifying and screening potential entry-level employees, the relative value of these benefits is minimal. Business, however, does recognize that long-term benefits may be realized through improved entry-level labor pools and enhanced economic and social climates. To the extent that improved community conditions can be correlated with good business practice and profits, participation in such collaborations is seen as beneficial.

VI. CONCLUSIONS

This chapter draws together the most critical findings and places them in a larger context, based on the following three questions, which frame our understanding of these partnerships:

- o What is their significance for at-risk youth and their educational progress?
- o What concrete effects do they have on at-risk students and on the educational process?
- o What is the potential of school/business collaborations to improve public education?

THEIR SIGNIFICANCE

School/business partnerships have been the catalyst in many communities for renewed interest in education and public support for special programs for economically disadvantaged and academically at-risk youth. Through their participation in collaborations, business leaders have learned the critical issues facing urban public education and begun to appreciate the complexities of educating thousands of primarily poor, urban minority youth for a successful transition to the labor force. By becoming better informed, community business leaders have become advocates for education in their communities. They have sustained their commitment to these partnerships and have expanded their scope. They have initiated new programs and recruited more community support. For example, the number of signers of the Boston Compact expanded from 15 corporate supports in 1982 to several hundred businesses, unions, colleges, universities and other organizations by 1987. In addition, supporters have launched a new scholarship endowment to support high school graduates who enter postsecondary training.

Another significant aspect of the partnerships is that they provide youth with direct evidence of the critical link between educational achievement and making a living, especially in terms of getting, keeping and prospering in a job. These partnerships reinforce this link by offering direct work experience, by giving students individualized attention and rewarding academic performance. They contrast with traditional employment and training programs for in-school youth by going beyond limited work maturity and job readiness training. Business plays an important role in them by providing youth with work opportunities after school, during the summer or after graduation. Participation by business ensures that youth, many of whom would have limited opportunities to gain work experience on their own, are placed in jobs and learn that they can succeed. This contribution has made the connection between school and future employment vivid for participants.

In viewing the growing significance of these partnerships, however, some observers have questioned whether collaborations should play as important a role as they appear to have assumed. Three concerns have been raised.

The first concern is whether the initiatives have sufficient educational or programmatic substance or are simply an avenue for public relations. Our reconnaissance disclosed a number of programs that exist in name only, the bulk of whose budget is dedicated to the production of glossy brochures and videotapes. We also identified collaborations in which a business appears to be primarily concerned with developing good community and public relations. Because of such programs, there is a tendency to dismiss all collaborations and question the motives of all principal actors. To do so would unjustly discount the commitment of many of the businesspeople involved and ignore the impact and potential that many programs have shown.

Our observations of the nine highly regarded initiatives profiled in the second volume of this study, which were drawn on as background for this report, demonstrate that many interventions are quite intensive and that business participation, in terms of leadership, contributions and direct intervention, is often substantial. We have seen many examples of business commitment, including not only charitable contributions but investments of executive, managerial and staff time and resources for addressing complex educational issues. Many businesses also marshal community and political support on behalf of public education. The partnerships we observed bring together a large number of individuals who devote significant time and energy to serving at-risk youth. Although they do not eschew publicity, we found that most program supporters do not fully capitalize on the potential for widespread recognition engendered by these programs. In fact, one criticism leveled at several initiatives is that they do not sufficiently publicize their efforts in an attempt to recruit more youth and business supporters.

A second concern about school/business collaborations is that business involvement could cause a narrowing of the emphasis of education toward serving the needs of business or employers. We see no evidence of this in either design or implementation of the programs studied. A major portion of direct business contributions have been targeted to support cultural, social, humanities and arts programs, and traditional extracurricular activities, such as sports and clubs. And while vocational courses are offered in a number of programs, it should be noted that at-risk youth in those programs are receiving vocational training normally reserved for better-performing students. Thus, a number of collaborations make it possible for less academically able students to obtain skills training.

A third concern is that the professional standing of teachers could be jeopardized by the intrusion of businesspeople in the classrooms. According to comments made by administrators and teachers during site observations, business involvement has had exactly the opposite effect. Despite initial fears among some that performance would be evaluated according to an unforgiving "bottom-line" template, teachers found that businesses came to collaborations with few preconceived notions about the problems of urban schools. In fact, school/business collaborations have frequently served as a means of educating a receptive audience of business and community leaders about the complexities of the problems facing public education.

Far from demeaning the professional standing of teachers, collaborations often seem to affirm and strengthen it. Our findings indicate that morale has improved as a result of many partnerships, largely because teachers had an opportunity to meet and discuss common problems and issues with other professionals in the community. There is surely no danger that school/business collaborations will replace existing educational systems. Even the most sophisticated and elaborate partnerships are designed to assist or augment schools' efforts. All the programs recognize that teachers will remain the primary providers of education and instruction.

School/business collaborations have emerged as significant primarily because they act as a catalyst for wider support for public education and can provide at-risk youth with experiential evidence of the link between academic achievement and eventual employment. We found no justification for concerns expressed by some critics that many collaborations are paper tigers, narrow educational opportunities, or are unwelcome intrusions on the work of professional educators. On the contrary, we found that the partnerships we studied are substantial interventions with reasonable educational and training components that enhance rather than replace existing curricula. Most teachers and administrators welcome the additional resources collaborations provide to students, teachers and schools.

THEIR EFFECTS

The school/business collaborations in our study have enabled schools to better serve at-risk youth in their communities by providing them with the following:

- Increased access to employment opportunities and work experience not normally available to at-risk students;

- Coaching and preparation on behaviors necessary to find, obtain and keep a job; and
- Increased personal attention--through tutoring and mentoring, special classes and close supervision--to youth who are usually excluded from additional school support services.

In addition, many programs have benefited entire schools by:

- Upgrading the physical plant;
- Increasing resources for enhancing existing programs or adding new ones;
- Increasing teacher morale; and
- Creating a new, knowledgeable constituency for public education.

Despite these benefits, there are clear limits on the impact that school/business collaborations can have. First, the collaborations are not alternatives to regular educational programs; even the most highly developed and comprehensive programs are designed to complement institutional programs and services. Although some impacts of the programs we studied are substantial, all build on a preexisting educational structure.

Second, while school/business collaborations can act as a catalyst for educational improvement, they alone cannot revitalize urban schools. Such a change must be grounded in the educational system itself--in its teachers, administrators, and leaders, and in political, community and parental advocacy for education. School/business collaborations can awaken concerns about public education and add an important dimension of legitimacy and urgency to educational reform, but they cannot bear the burden of such reform alone.

Third, school/business collaborations, even those that recruit from a disadvantaged student population, rarely serve the most disadvantaged or at-risk students. Two related factors, the emphasis on student employment and the requirements for job placement, contribute to this lack of focus on highest-risk youth.

The central substantive contribution of business is employment during the school year or during the summer. Typically, jobs are offered through these programs to high school students in their junior or senior year. Almost by definition, students who have advanced this far in high school already have a track record of succeeding academically, since they have passed the critical periods when the highest number of students drop out. Both partners defend the practice. Schools argue that only juniors and seniors have made enough progress toward graduation to allow them to devote time to holding a job in the afternoon; businesses, citing minimum working age standards, argue that they can only offer employment to older students. The end result, however, is that school/business collaborations whose strongest component is the provision of adolescent work experience do not serve students when they are at greatest risk of dropping out.

The partnerships forged between schools and businesses are often tenuous arrangements that depend on success for survival. This relationship can cause programs to exclude students in greatest need and at greatest risk. For example, program administrators and schools are very concerned that the good will extended to them by business not be jeopardized. This concern is often reflected in their careful selection of students who they believe can benefit from the program and their selective nomination of only the best program participants for jobs with business supporters. Thus, students at greatest risk are excluded from the program and participants exhibiting insufficient progress are not placed. Businesses often foster this selectivity by complaining when students' work performance is inadequate and, at times, withdrawing participation if the program is complicated by ill-prepared or unmotivated youth.

The basic limitations on the effectiveness of school/business partnerships in benefiting business, schools and students can be summarized as follows:

1) Impacts of collaborations on business are minimal, though the private sector may experience indirect long-term benefits from participation.

2) School/business collaborations are not a panacea for the problems of urban schools. They only offer added resources to the existing educational system; at best, they complement the system.

3) Collaborations are not a solution for students at greatest risk, though they generally serve students who have neither benefited from other programs nor received much individual attention in the traditional education system. By design, school/business partnerships rarely serve younger students on the verge of dropping out or students whose needs are greater than can be accommodated within the structure of the program.

THEIR POTENTIAL

Business involvement in education, particularly in school/business collaborations, has increasingly been heralded as an important avenue for improving the nation's schools. Our endorsement is more cautious.

There are three principal roles in which school/business collaborations have shown potential for addressing educational reform and serving at-risk youth: as a catalyst for educational change and improvement; as a source of new incentives to keep at-risk youth in school; and as a source of advocacy and support for public education. Each role bears further discussion.

A Catalyst for Educational Change

There is evidence that school/business partnerships that focus on schools or systems can serve as a catalyst for sustained school or educational improvement. For example, the Boston Compact has approached urban education as a community issue requiring a community response. Although not all its objectives for educational improvement have been achieved, the Compact initiative has placed public education on the agenda of both business and the community, and increased attendance and improved academic achievement have been observed in some schools. However, improvements in dropout rates have remained elusive. Similar results have been observed at the school level in Houston and New York City, where adopt-a-school programs have emerged as a citywide business response to problems in the public schools.

In contrast, programs that focus primarily on student employment have limited value in effecting overall educational improvement, though their immediate impact on the students involved should not be discounted. As separate, almost independent programs, their effect on the delivery of education in public schools is minimal.

Provision of Jobs and Scholarships to At-Risk Youth

School/business collaborations have demonstrated innovation in the incentives they offer individual at-risk youth. While their emphasis on work maturity instruction coupled with direct employment experience is frequently found in vocational training programs, the participation of at-risk youth in a substantive intervention of this type is rare and represents an important innovation.

Collaborative programs have also provided substantial resources for scholarship support. Indeed, such support is the most popular recent trend in school/business collaborations. In Boston, a multimillion dollar endowment was established to provide "last dollar" grants to students entering college; in Cleveland, students can amass scholarship credits in recognition of passing grades in high school; as part of the I Have a Dream initiative inspired by Eugene Lang, business leaders in New York and other communities offer college scholarships and social support services programs designed to keep youth in school. Again, the interventions themselves are not unique, but their availability to at-risk youth is. Although such efforts are still in their infancy, they could become an important dimension of school/business partnerships in the future.

Becoming an Advocate and Constituency for Schools

Through their involvement in these partnerships, businesspeople often enrich their knowledge of school issues as a result of experiencing the problems facing schools first-hand, learning the complexities of issues in school reform, and confronting the need for effective and cost-efficient solutions to school problems. This well-grounded understanding, coupled with the political clout that businesses wield in local and state government, can make business a formidable and effective advocate for public education.

School/business partnerships thus have the potential for filling an important gap in public support of education. Many school/business partnerships have emerged in communities where those who were once the strongest advocates for improved public education have abandoned either the community or the school system. Many urban school districts have experienced dramatic decreases in the size of their school populations; the students who remain are often drawn primarily from low-income, recent immigrant and minority families. Historically, leadership and advocacy for improved public education has come from middle-class parents who once organized effectively to encourage improvements and voted the public funding necessary to accomplish them. A number of factors--including racial desegregation and the concomitant white flight to private, parochial and suburban schools--have changed the demographic composition of urban families with school-age children and have largely diluted the base of support for urban public education. For the most part, parents who still have children in public schools have not been able to muster sufficient political strength to dictate movement toward reform of those schools.

To a great extent, the potential of business as a school improvement advocate has yet to be realized. However, we have seen evidence of such advocacy in the Boston Compact, a model that is beginning to see wide replication. An even more revealing example of the potential for business to become a political advocate is the recent testimony by chief executive officers of five major corporations before Congressional committees on behalf of continued and expanded funding of federal support for public education.

THE FUTURE

Beyond their effectiveness and current impact, the key questions that remain about school/business collaborations concern their future viability. In the past decade, literally thousands of partnerships between schools and businesses have emerged and been applauded. A variety of organizations--the Conference Board, the Committee for Economic Development, the National Alliance of Business--have identified school/business partnerships as one of the most important agenda issues for corporate America in this decade, and national newspapers have identified school/business partnerships as a major factor in both educational change and redefined corporate responsibility. Business publications have characterized school/business collaborations as an important innovation in the way businesses deal with their community environments. Educators' conferences and journals have dedicated substantial space to describing good partnerships and assessing the collaborations' impact on the field of education. Federal and state government education agencies have cited school/business collaborations as significantly supporting students and education.

The increase in attention paid to school/business collaborations can be correlated with a wave of new programs and program expansion across the country. Communities in which partnerships existed have expanded programs to serve more youth; other communities have attempted to replicate existing models; while others have proposed and implemented whole new approaches.

Recent years have also witnessed the emergence of a number of efforts to replicate promising models. Initial replications were generally confined to small demonstrations of student-focused initiatives, such as The Edna McConnell Clark Foundation's Partnership Projects. Recently, however, the National Alliance of Business has provided seed grants to seven communities so they can adopt the principles and lessons of the Boston Compact in an effort to improve their schools. The Annie E. Casey Foundation is about to award substantial five-year grants to five communities to stimulate large-scale structural reform in their educational and social service delivery systems. While such efforts are in their infancy, the fact that they are being pursued reflects a high degree of agreement on the need for continuing school/business collaboration.

In the short term, we anticipate critical changes in the nature of these collaborations. New individual partnerships between schools and businesses will likely be established as part of larger communitywide efforts to improve education. While individual pairings and special programs will continue to be an important form of business participation in education, such efforts will be melded into larger initiatives that seek to improve the delivery of education in general.

We also expect more collaborations to be established with clearly articulated educational and employment goals. Some may simulate the approach established in Boston; some will devise new indicators to assess progress. It is unlikely that these partnerships will be dissolved if goals are not quickly achieved. Community leaders in both education and business have grown much more sophisticated about the process of change in education and no longer expect quick-fix solutions. Since the problems were a long time in the making, the partnerships now being created to address them are intended for the long haul.

The issue for the longer term is whether the enthusiasm that has energized these good intentions is short-term and crisis-driven and will fade as new economic problems capture the interest of the business community and the pace of institutional change in public education asserts its deliberate course. It is clear that economic concerns have been a spur to business involvement in public education. Many large economic issues are being redefined as educational improvement issues. Educational problems are being identified as potential economic catastrophes. Such an environment is fertile for continuing school/business partnerships.

At the same time, however, private sector representatives who have become involved in public school affairs are learning how difficult it is to make the system more responsive to their concerns. Will their growing knowledge of public education help them to be patient with the slow pace of change? Will they continue to support existing collaborations--very few of which have survived for more than a few years--without the reinforcement of broader improvements? Will they add to or move on from individual collaborative programming to efforts to influence the development of public policy?

One determining factor will be the condition of the economy. If an economic downturn increases the availability of competent entry-level workers, the pressure on business to insure that schools produce such workers will decline. Increased economic pressure would also distract business from collaborative efforts with the schools as the private sector attends to its own survival.

The second determinant will be the degree of public education's responsiveness to the need for broad change and improvement. Business can not be expected to continue its involvement in the schools if it perceives the effort to proceed in a vacuum. We have seen that business partners in collaborations do not set specific goals whose achievement is the prerequisite for participation. But how long will this last? The record so far shows that the partnerships that have survived more than a few years are those like the ones in Philadelphia and the state of California that *can* demonstrate significant accomplishment.

Finally, we doubt that the school/business collaborations themselves will be a crucial force in effecting radical structural reform in the delivery of education. Since the programs are grafted onto existing efforts, they do not have the structural position to fundamentally alter the delivery of education. Rather, we see that these collaborations have powerful potential--to create an educated influential constituency for public education.

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